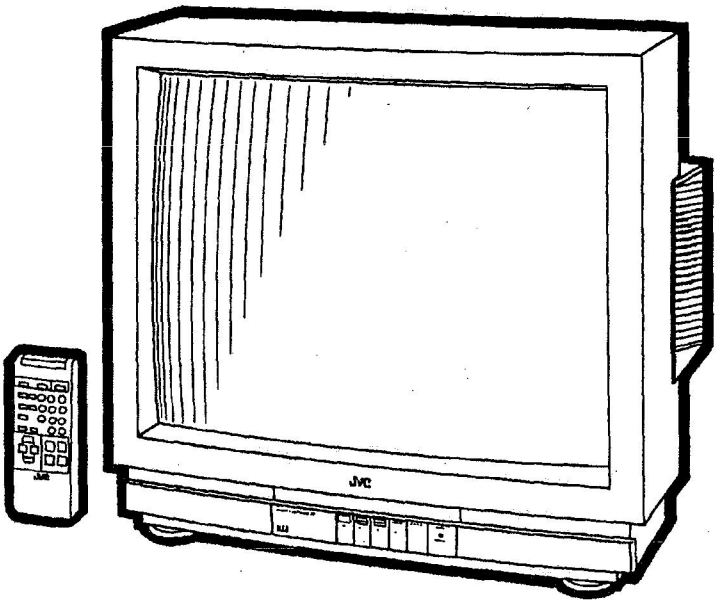
JVC

SERVICE MANUAL

26" COLOR MONITOR / RECEIVER

AV-2650S(us)

BASIC CHASSIS
FXIII



CONTENTS

■ SPECIFICATIONS 2
■ SAFETY PRECAUTIONS 3
■ FEATURES 4
■ OPERATING INSTRUCTIONS 4
■ SPECIFIC SERVICE INSTRUCTIONS 14
■ SERVICE ADJUSTMENTS 17
■ PARTS LIST 23
★ SCHEMATIC DIAGRAM(APPENDED) ..... ①~⑧

COPYRIGHT © 1990 VICTOR COMPANY OF JAPAN,LTD.

No.50387
Apr.1990

SPECIFICATIONS

Item	Content
Dimensions	65.6cm (W) ×51.7cm (D) ×58.1cm (H)
Weight	34.5kg
TV System and Color system	
TV RF System	CCIR (M)
Color System	NTSC, BTSC (Multichannel Sound)
TV Receiving Channels and Frequency	
VL Band	(02 ~ 06) 54MHz ~ 88MHz
VH Band	(07 ~ 13) 174MHz ~ 216MHz
UHF Band	(14 ~ 69) 470MHz ~ 806MHz
CATV Receiving Channels and Frequency (Quartz Synthesizer system)	
Low Band	(02 ~ 06, A-8) by (02 ~ 06&01)
High Band	(07 ~ 13) by (07 ~ 13)
Mid Band	(A ~ 1) by (14~22)
Super Band	(J~W) by (23~36)
Hyper Band	(W+1 ~ W+28) by (37 ~ 64)
ULTRA Band	(W+29 ~ W+84) by (65 ~ 125)
Sub Mid Band	(A4 ~ A1) by (96 ~ 99)
	(54MHz ~ 804MHz)
TV/CATV Total Channel	180 Channels
Intermediate Frequency	
Video IF Carrier	45.75MHz
Sound IF Carrier	41.25MHz (4.5MHz)
Color Cub Carrier	3.58MHz
Antenna Input Impedance	75Ω UHF VHF in common (F-Type)
Power Input	120V AC, 60Hz
Power Consumption	135W (max.), 98W (avg.)
Picture Tube	26"In-Line Type Full-Square Tube
Viewable Picture Size	52.8cm (W) ×39.6cm (H)
High Voltage	28kV ±1kV (at zero beam current)
Speaker	8×12cm Oval Type, 8Ω×2
Audio Power Output	2.2W+2.2W
Video External Input	1 Vp-p 75Ω
Audio External Input	500mV rms (−4dBs), High Impedance
Video Line Output	1 Vp-p 75Ω
Audio Line Output	500mV rms (−4dBs)
	Low Impedance (400Hz, 100% modu.)
S-VIDEO IN	Y: 1 Vp-p Positive, 75Ω (negative sync. provided)
	C: 0.286 Vp-p(burst signal), 75Ω
Variable Audio Output	More than 0~1000mV rms (+2.2dBs)
	Low Impedance (400Hz, 100% modu.)
Tube	1
IC	14 (In TV), 1(In Remocon)
Transistor	52 (In TV), 2(In Remocon)

Design & specification subject to change without notice.

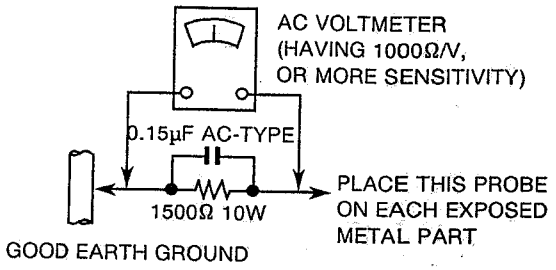
SAFETY PRECAUTIONS

1. The design of this product contains special hardware, many circuits and components specially for safety purposes. For continued protection,no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits. Service should be performed by qualified personnel only.
2. Alterations of the design or circuitry of the products should not be made. Any design alterations or additions will void the manufacturer's warranty and will further relieve the manufacturer of responsibility for personal injury or property damage resulting therefrom.
3. Many electrical and mechanical parts in the products have special safety-related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in the parts list of Service manual. **Electrical components having such features are identified by shading on the schematics and by (⚠) on the parts list in Service manual.** The use of a substitute replacement which does not have the same safety characteristics as the recommended replacement part shown in the parts list of Service manual many create shock, fire, or other hazards.
4. **Use isolation transformer when hot chassis.**
   The chassis and any sub-chassis contrained in some products are connected to one side of the AC power line. An isolation transformer of adequate capacity should be inserted between the product and the AC power supply point while performing any service on some products when the HOT chassis is exposed.
5. **Don't short between the LIVE side ground and NEUTRAL side grounding or EARTH side ground when repairing.**
   Some model's power circuit is partly different in the GND. The difference of the GND is shown by the LIVE (⊥) side GND, the NEUTRAL (⏚) side GND and EARTH (⏚) side GND. Don't short between the LIVE side GND and NEUTRAL side GND or EARTH side GND and never measure with a measuring apparatus (oscilloscope etc.) the LIVE side GND and NEUTRAL side GND or EARTH side GND at the same time.
   If above note will not be kept, a fuse or any parts will be broken.
6. If any repair has been made to the chassis, it is recommended that the B_1 setting should be checked or adjusted (See ADJUSTMENT OF B_1 POWER SUPPLY).
7. The high voltage applied to the picture tube must conform with that specified in Service manual. Excessive high voltage can cause an increase in X-Ray emission, arcing and possible component damage, therefore operation under excessive high voltage conditions should be kept to a minimum, or should be prevented. If severe arcing occurs, remove the AC power immediately and determine the cause by visual inspection (incorrect installation, cracked or melted high voltage harness, poor soldering, etc.). To maintain the proper minimum level of soft X-Ray emission, components in the high voltage circuitry including the picture tube must be the exact replacements or alternatives approvided by the manufacturer of the complete product.
8. Do not check high voltage by drawing an arc. Use a high voltage meter or a high voltage probe with a VTVM. Discharge the picture tube before attempting meter connection, by connecting a clip lead to the ground frame and connecting the other end of the lead through a 10kΩ 2W resistor to the anode button.
9. When service is required, observe the original lead dress. Extra precaution should be given to assure correct lead dress in the high voltage circuit area. Where a short circuit has occurred, those components that indicate evidence of overheating should be replaced. Always use the manufacturer's replacement components.
10. **Isolation Check**
    (Safety for Electrical Shock Hazard)
    After re-assembling the product, always perform an isolation check on the exposed metal parts of the cabinet (antenna terminals, video/audio input and output terminals, Control knobs,metal cabinet, screwheads, earphone jack, control shafts, etc.) to be sure the product is safe to operate without danger of electrical shock.

(1) **Dielectric Strength Test**
The isolation between the AC primary circuit and all metal parts exposed to the user, particularly any exposed metal part having a return path to the chassis should withstand a voltage of 1100V AC (r.m.s.) for a period of one second.
(. . . . Withstand a voltage of 1100V AC (r.m.s.) to an appliance rated up to 120V, and 3000V AC (r.m.s.) to an appliance rated 200V or more, for a period of one second.)
This method of test requires a test equipment not generally found in the service trade.

(2) **Leakage Current Check**
Plug the AC line cord directly into the AC outlet (do not use a line isolation transformer during this check.) Using a "Leakage Current Tester", measure the leakage current from each exposed metal part of the cabinet, particularly any exposed metal part having a return path to the chassis, to a known good earth ground (water pipe, etc.). Any leakage current must not exceed 0.5mA AC (r.m.s.).

• Alternate Check Method
Plug the AC line cord directly into the AC outlet (do not use a line isolation transformer during this check.). Use an AC voltmeter having 1,000 ohms per volt or more sensitivity in the following manner. Connect a 1,500Ω 10W resistor paralleled by a 0.15μF AC-type capacitor between an exposed metal part and a known good earth ground (water pipe, etc.). Measure the AC voltage across the resistor with the AC voltmeter. Move the resistor connection to each exposed metal part, particularly any exposed metal part having a return path to the chassis, and measure the AC voltage across the resistor. Now, reverse the plug in the AC outlet and repeat each measurement, Any voltage measured must not exceed 0.35V AC (r.m.s.). This corresponds to 0.5mA AC (r.m.s.).



11. **High voltage hold down circuit check.**
    After repair of the high voltage hold down circuit, this circuit shall be checked to operate correctly.
    See item **"How to check the high voltage hold down circuit"**.

■ **ONLY CANADA**

This mark shows a fast operating fuse, the letters indicated below show the rating.

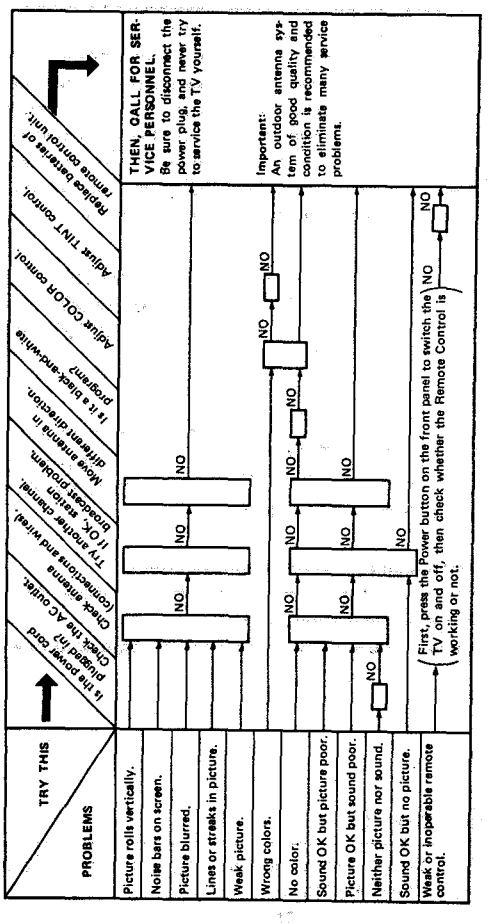
FEATURES

- New chassis design enables use of a single board with simplified circuitry.
- Provided with miniature tuner (TV/CATV).
- PLL synthesizer system TV/CATV totaling 180 channels.
- Deletion of user VR by master command and increased features possible simultaneously.
- Multifunctional remote control permits picture adjustment.
- Adoption of the CHANNEL GUARD function prevents the specific channels from being selected, unless the "ID number" is key in.
- On-screen clock display function.
- On-screen control.select display function.
- Built-in MTScircuit conpatible with AV system.
- S-video input terminal.
- Variable audio output terminal.

OPERATING INSTRUCTIONS

BEFORE YOU CALL FOR SERVICE

Be sure to review all the instructions written in this booklet. Then try to check according to the following chart.


TRY THIS
PROBLEMS
Is the power cord plugged in?
Check the AC outlet.
Check antenna connections and wires.
TV another station. If OK, broadcast station problem.
Move antenna in different direction.
Is it black-and-white program?
Adjust COLOR control.
Adjust TINT control.
Replace batteries of remote control unit.
THEN, CALL FOR SERVICE PERSONNEL. Be sure to disconnect the power plug, and never try to service the TV yourself.
Important: An outdoor antenna system of good quality and condition is recommended to eliminate many service problems.
Picture rolls vertically.
Noise bars on screen.
Picture blurred.
Lines or streaks in picture.
Weak picture.
Wrong colors.
No color.
Sound OK but picture poor.
Picture OK but sound poor.
Neither picture nor sound.
Sound OK but no picture.
Weak or inoperable remote control.
First, press the Power button on the front panel to switch the TV on and off, then check whether the Remote Control is working or not.
NO
YES

SPECIFICATIONS

Type	: Color monitor/receiver	**Line output terminals**	: Video/1 Vp-p, 75 ohms Audio/500 mV rms (-4 dBs), low impedance (400 Hz when modulated 100 %)
Reception system	: NTSC system, BTSC system (Multichannel sound)		
Channel coverage	: VHF 2 – 13, UHF 14 – 69; Sub-Mid, Mid, Super, Hyper and Ultra bands (180-channel frequency synthesizer system)	**S-VIDEO IN terminal**	: Y/1 Vp-p positive, 75 ohms (negative sync provided) C/0.286 Vp-p (burst signal), 75 ohms
Power requirement	: AC 120 V, 60 Hz	**Variable audio output terminals**	: More than 0 – 1000 mV rms (+2.2 dBs), low impedance (400 Hz when modulated 100 %)
Power consumption	: Max. 135 W, Avg. 98 W		
Screen size	: 26" diagonally measured, Full Square	**External dimensions (W x H x D)**	: 25-7/8" x 22-7/8" x 20-3/8"
Audio output	: 2.2 W + 2.2 W		
Speakers	: 3-3/16" x 4-3/4" ellipse x 2	**Weight**	: 75.9 lbs
Antenna input terminal	: 75-ohm (VHF/UHF) terminal (F-type connector)	**Accessories**	: Remote control unit (RM-C424) AA-size dry cell battery x 2
External input terminals	: Video/1 Vp-p, 75 ohms Audio/500 mV rms (-4 dBs), high impedance		

Design and specifications subject to change without notice.

SAFETY PRECAUTION

CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN
CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK,
DO NOT REMOVE COVER (OR BACK).
NO USER-SERVICEABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

Caution:
Changes or modifications not approved by JVC could void the user's authority to operate the equipment.

WARNING:
TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS TV SET TO RAIN OR MOISTURE.

CAUTION: TO INSURE PERSONAL SAFETY, OBSERVE THE FOLLOWING RULES REGARDING THE USE OF THIS UNIT.

1. Operate only from the power source specified on the unit.
2. Avoid damaging the AC plug and power cord.
3. Avoid improper installation and never position the unit where good ventilation is unattainable.
4. Do not allow objects or liquid into the cabinet openings.
5. In the event of trouble, unplug the unit and call a service technician. Do not attempt to repair it yourself or remove the rear cover

Caution:
When you do not use this TV set for a long period of time, be sure to disconnect the power plug from the AC outlet for your safety. If the TV set is plugged into an AC outlet, a small amount of current is applied to the TV set even if the TV set's power is turned off.

Thank you for purchasing a JVC color monitor/receiver (TV). Your JVC TV carries many useful features including the MASTER COMMAND system which allows operation of all TV functions via a single remote control unit.
To ensure your complete understanding, please read all instructions in this booklet before operation.

FEATURES

- 26-Inch FS (Full-Square) picture tube.
- Comb filter for improved picture quality.
- 180-Channel cable-compatible frequency synthesizer tuner with built-in MTS decoder.
- S-VIDEO input terminal for taking best advantage of Super VHS.
- Video/audio input, line output and variable audio output terminals.
- MASTER COMMAND remote control with multi-color on-screen "Menu" display, allowing interactive, total TV operation.

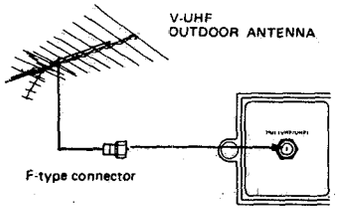
CONTENTS

Installation	3
Remote Control Use	3
Controls and Their Locations	4
TV Operation	4
Function Buttons	6
Menu Button	8
More Useful Functions	17
Connecting to External Equipment	18
Before You Call for Service	Back page
Specifications	Back page

INSTALLATION

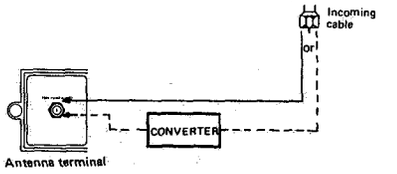
ANTENNA CONNECTIONS

An outdoor antenna is recommended for good TV picture reception. (For installation of the outdoor antenna system, consult your local dealer.)

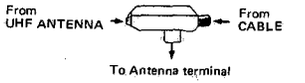


Antenna terminal (Rear)

CABLE TV CONNECTIONS



- Some cable companies require a converter box to receive all available programs. Others may require it for subscription or "premium" programming. Consult your local cable company for correct installation.
- When connecting both a cable (75-ohm coaxial) and a UHF antenna (300-ohm feeder), use the optional antenna mixer (CE41467) to make a single connection.

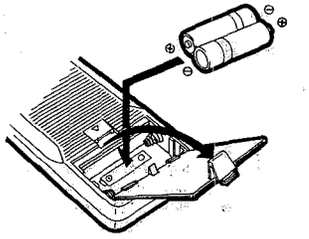


Note: With this antenna mixer, reception of cable channels higher than "Channel W + 17" is not possible.

REMOTE CONTROL USE

Correct Use
- Point to the Remote Control Sensor of the TV set.
- The maximum operable distance is approximately 23 ft from the Remote Control Sensor, and no more than 30° to either side of center.
- Operation of the Remote Control is most effective when there is nothing between it and the Remote Control Sensor.
- Duration of the batteries is approximately 6 months to 1 year. (Duration varies according to frequency of use.) Replace the batteries when the remote operation becomes unstable.

Battery Installation/Notes
- Press the tab and lift up the cover in the direction of the arrow.
- Correctly install the batteries, observing (+/-) polarities as shown.
- Do not use a combination of old and new batteries or batteries of different types.
- If batteries become exhausted, remove and replace them soon.
- If Remote Control will not be used for more than 2 weeks, remove batteries.
- When battery leakage occurs, clean the battery compartment with a soft cloth and replace the batteries.

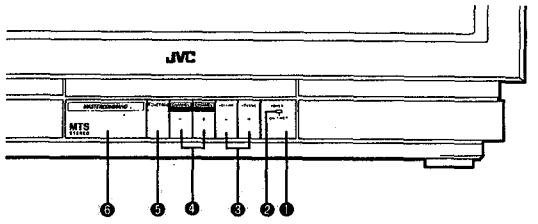


(No.50387) 5

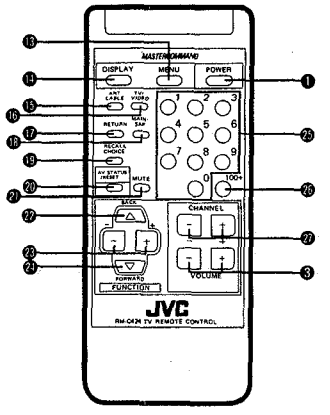
AV-2650S

CONTROLS AND THEIR LOCATIONS

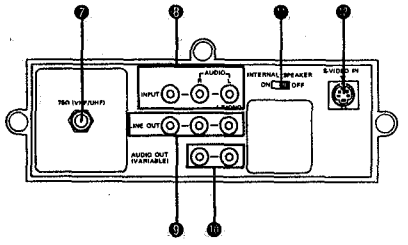
Front Panel Control Section



Remote Control Section



Rear Panel Control Section



❶ POWER button
❷ POWER/ON TIMER indicator
❸ VOLUME (–/+) buttons
❹ CHANNEL/LEVEL (–/+) buttons
❺ FUNCTION button
❻ Remote Control Sensor
❼ Antenna terminal
❽ VIDEO/AUDIO INPUT connectors
❾ LINE OUT connectors
❿ AUDIO OUT (VARIABLE) connectors
⓫ INTERNAL SPEAKER switch (ON/OFF)
⓬ S-VIDEO IN connector
⓭ MENU button
⓮ DISPLAY button
⓯ ANT/CABLE button
⓰ TV/VIDEO button
⓱ RETURN button
⓲ MAIN/SAP button
⓳ RECALL CHOICE button
⓴ AV STATUS/RESET button
㉑ MUTE button
㉒ FUNCTION BACK button
㉓ FUNCTION (–/+) buttons
㉔ FUNCTION FORWARD button
㉕ 10-Digit Keypad
㉖ 100 + button
㉗ CHANNEL (–/+) buttons

*Please refer to the above numbers on the following pages.

TV OPERATION

First Preparations

- **Connect either Antenna or Cable TV** by following "Installation" instructions on page 3.
- Insert batteries into the Remote Control unit by following "Remote Control Use" instructions on page 3.
- **Connect the power cord** to 120 V, 60 Hz AC outlet. The power cord is supplied with a polarized plug. Therefore, it will only insert one way into the wall outlet. DO NOT DEFEAT THE POLARIZED PLUG. If you have difficulty, consult your local dealer.

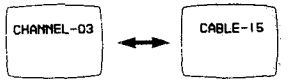
Basic Operating Procedure

1 **Press POWER button ❶** on either the Remote Control or front panel. POWER/ON TIMER indicator ❷ lights. Press this button again to turn power off.

Note: If POWER/ON TIMER indicator remains lit even after the power is turned off, it shows the ON TIMER is in operation. See "5. SET ON TIMER" on page 11 and "7. HOME SITTER" on page 12.

2 **Press TV/VIDEO button ⓰** on the Remote Control (or FUNCTION and CHANNEL/LEVEL (–/+) buttons on the front panel) to select the TV mode.

3 **Press ANT/CABLE button ⓯** on the Remote Control to select the broadcast mode. Each time it is pressed, the mode is switched between "CHANNEL" and "CABLE". When connected to an antenna, select "CHANNEL" mode for normal VHF/UHF reception. When connected to cable TV, select "CABLE" mode. The on-screen display will show the following:



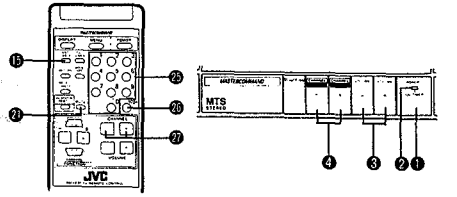
Note: For mode selection using the front panel controls, see "FUNCTION BUTTONS" on next page.

4 **Select desired channel** using CHANNEL (–/+) buttons ㉗ on the Remote Control (or CHANNEL/LEVEL (–/+) buttons ❹ on the front panel). Pressing the (+) button advances to higher channels, (–) button to lower channels.

Note: Certain channels have been preset at the factory. It may be necessary to add or erase some channels in your areas. See "9. INITIAL SET-UP" on page 15 for presetting channels.

- Channels can be selected directly by using 10-Digit Keypad ㉕ on the Remote Control. For example; if you select channel 5, just press "5", or press "0" first, then press "5". For cable channels of 3-digit numbers, use 100+ button ㉖ . For example, if selecting channel 120, press 100+ button first, then press "2", then "0". Also refer to the CABLE TV CHANNEL CONVERSION CHART below.

Note: When a video source such as a VCR is connected to the antenna terminal to be viewed on Channel 3 (or Channel 4), sometimes channel selection may result in an unclear or distorted picture. In this case, re-select Channel 3 (or 4) by pressing "3" (or "4") of the 10-Digit Keypad and the picture will become clear.



5 **Press VOLUME (–/+) buttons ❸** on either the Remote Control or front panel to adjust volume to your desired listening level. Pressing the (+) button will increase sound volume, the (–) button will decrease sound volume. The volume level is indicated on the screen by reference number (0 – 50) and by bar scale as shown.

Note: The volume level can be muted instantly by pressing MUTE button ㉑ on the Remote Control. See "MUTE Button" on page 17.

On-Screen Display

- Once the on-screen display appears on the screen, it disappears in a few seconds. (Only the clock time can be kept displayed on the screen. See "DISPLAY Button" on page 17.)
- When tuned to a channel where no program is being broadcast, the on-screen display may be unclear or blurred.
- On-screen displays are available in two different layouts (except for displays of the channel number and clock time). See "9. INITIAL SET-UP" on page 15 for selecting the display mode.
- Channel numbers of the "CHOICE channels" can be displayed with their station call letters. If you prefer to do so, enter the station call letters when you program the "CHOICE channels". See "1. CHOICE PROGRAMING" on page 8.

CABLE TV CHANNEL CONVERSION CHART

In addition to normal TV reception from an antenna for VHF (Channels 2 – 13) and UHF (Channels 14 – 69), your TV set is equipped to receive non-scrambled cable TV channels. Sub-Mid band (A-8, A-4 – A-1), Mid band (A–I), Super band (J – W), Hyper band (W + 1 – W + 28) and Ultra band (W + 29 – W + 84) can be received by using the channel selections as shown in the following chart.

*	A-8	A-4	A-3	A-2	A-1	A	B	C	D	E	F	G	H	I	J	K	L	M	N
**	01	96	97	98	99	14	15	16	17	18	19	20	21	22	23	24	25	26	27
*	O	P	Q	R	S	T	U	V	W	W+1	W+2	W+3	W+4	W+5	W+6	W+7	W+8	W+9	W+10
**	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46
*	W+11	W+12	W+13	W+14	W+15	W+16	W+17	W+18	W+19	W+20	W+21	W+22	W+23	W+24	W+25	W+26	W+27	W+28	W+29
**	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65
*	W+30	W+31	W+32	W+33	W+34	W+35	W+36	W+37	W+38	W+39	W+40	W+41	W+42	W+43	W+44	W+45	W+46	W+47	W+48
**	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84
*	W+49	W+50	W+51	W+52	W+53	W+54	W+55	W+56	W+57	W+58	W+59	W+60	W+61	W+62	W+63	W+64	W+65	W+66	W+67
**	85	86	87	88	89	90	91	92	93	94	100	101	102	103	104	105	106	107	108
*	W+68	W+69	W+70	W+71	W+72	W+73	W+74	W+75	W+76	W+77	W+78	W+79	W+80	W+81	W+82	W+83	W+84		
**	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125		

* : Regular cable channel designations
** : Your TV set's corresponding on-screen CABLE channel numbers

Note: Reception of channel A-5 ("95" of the TV set's on-screen CABLE channel numbers) is not recomended for your TV set.

FUNCTION BUTTONS

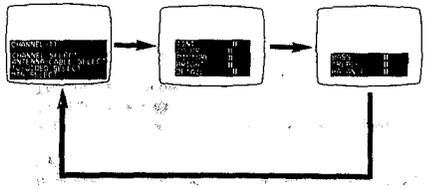
The FUNCTION button on the front panel selects the control modes for TV operation and picture/sound adjustment.

- Press FUNCTION button ❺ on the front panel. The first time it is pressed, the following display appears on the screen.

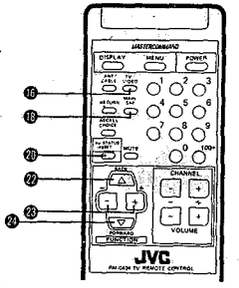
- At this time, the top line shows the current channel number.

Press FUNCTION button ❺ to select the desired item for adjustment. Each time the FUNCTION button is pressed, the magenta-colored portion shifts in the order below to show that the colored item in the list can be adjusted.

Note: Three pages of on-screen displays are available with the FUNCTION button.



1 CHANNEL SELECT mode
2 ANTENNA/CABLE SELECT mode
3 TV/VIDEO SELECT mode
4 MTS SELECT mode
5 TINT adjustment mode
6 COLOR adjustment mode
7 PICTURE adjustment mode
8 BRIGHT adjustment mode
9 DETAIL adjustment mode
10 BASS adjustment mode
11 TREBLE adjustment mode
12 BALANCE adjustment mode

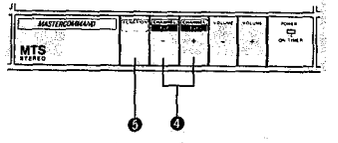


Note: The Remote Control's FUNCTION BACK button ㉒ or FORWARD button ㉓ selects **only picture and sound adjustment modes: TINT, COLOR, PICTURE, BRIGHT, DETAIL, BASS, TREBLE and BALANCE.** The other control modes can be selected directly with the Remote Control's respective buttons. Pressing FUNCTION FORWARD button ㉓ advances the colored portion in the order as shown on the left for "picture/sound adjustment modes", pressing FUNCTION BACK button ㉒ advances in the reverse order.

- After selecting the desired mode, press CHANNEL/LEVEL (-/+) buttons ❹ on the front panel or FUNCTION (-/+) buttons ㉘ on the Remote Control while the selected mode indication is being displayed to make your preferred adjustment. Remote Control FUNCTION (-/+) buttons ㉘ control **only picture and sound adjustments.**

Notes:

- When using the front panel buttons, before the FUNCTION button is pressed for the first time with nothing displayed on the screen, the TV is in the "CHANNEL SELECT" mode. Therefore, in this mode, channel selection is possible by pressing CHANNEL/LEVEL buttons ❹ on the front panel.
- After completing picture and sound adjustments from the Remote Control, selecting either FUNCTION (-) or (+) button ㉓ will return directly to the last chosen adjustment mode.



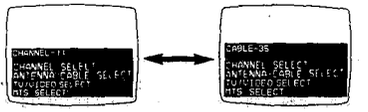
1 CHANNEL SELECT mode

In this mode, press CHANNEL/LEVEL (+) button ❹ on the front panel to scan up the channel, and (-) button for scan down the channel.

(The screen illustrations below show the case when the TV is in the "CHANNEL" mode. When in the "CABLE" mode, the "CABLE" indication appears instead of "CHANNEL".)

2 ANTENNA/CABLE SELECT (broadcast) mode

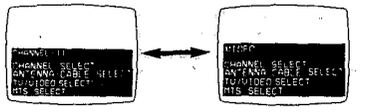
In this mode, press CHANNEL/LEVEL (-/+) buttons ❹ on the front panel to change the broadcast mode between "CHANNEL" (for regular VHF/UHF channels) and "CABLE" (for cable channels).



3 TV/VIDEO SELECT mode

In this mode, press CHANNEL/LEVEL (-/+) buttons ❹ on the front panel to switch the mode between "TV" (for off-air or cable TV broadcasts) and "VIDEO" (for video source which is connected to the TV set's VIDEO/AUDIO INPUT connectors ⓲ or S-VIDEO IN connector ⓳). See "CONNECTING TO EXTERNAL EQUIPMENT" on page 18.

Note: Mode selection can be performed with TV/VIDEO button ⓰ on the Remote Control.



4 MTS SELECT mode

Your TV set incorporates an MTS (Multichannel Television Sound) decoder to receive stereo broadcasts and any accompanying SAP (Second Audio Program), such as a bilingual broadcast.

Available sound will be:

(1) Monaural (MAIN) audio program (regular broadcasts)
(2) STEREO (MAIN) audio program
(3) Second Audio Program (SAP)

In this mode, the "← ON AIR" shows which MTS mode is now being broadcast. Press CHANNEL/LEVEL (-/+) buttons ❹ to change the reception mode among "STEREO", "SAP" and "MONO".

Each time it is pressed, the color of the indication changes from blue to magenta to show that the mode has just been switched.

Notes:

- Mode selection can be performed with MAIN/SAP button ⓱ . Each time it is pressed, the mode changes in the order of "STEREO" – "SAP" – "MONO" – "STEREO".
- If the TV set is kept always set to the stereo mode, when a stereo broadcast is received, stereo sound is output automatically.
- If the received stereo signal is weak, noise may be heard. In such a case, press CHANNEL/LEVEL (-/+) buttons ❹ (or MAIN/SAP button ⓱) to engage the MONO mode for better sound reception.
- If the received SAP signal is weak, the SAP will not be heard. Select the MONO mode for better sound reception.
- Even if both stereo and SAP broadcasts are received, both broadcasts cannot be heard at a time.

When using the TV set for cable reception

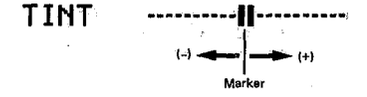
Transmission of Cable TV signals may differ from off-air TV broadcasts. It is possible that the multichannel TV sound (MTS) may not be received satisfactorily.

5 – 12 Picture/sound adjustment modes

In these modes, an adjustment scale with a marker appears on the screen. Press CHANNEL/LEVEL (-/+) buttons ❹ on the front panel or FUNCTION (-/+) buttons ㉘ on the Remote Control to fine adjust each item to your preference according to the chart below. (The center position is only a reference level, rather than a standard setting.)

(-)	ITEM	(+)
Reddish	TINT	Greenish
Subdued	COLOR	Vivid
Light	PICTURE	Strong
Dark	BRIGHT	Bright
Soft	DETAIL	Sharp
Soft	BASS	Strong
Soft	TREBLE	Strong
Left	BALANCE	Right

Note: When you wish to restore all adjustment modes to their scale's center position, use AV STATUS/RESET button ㉙ . For details, see "AV STATUS/RESET button" on page 10.



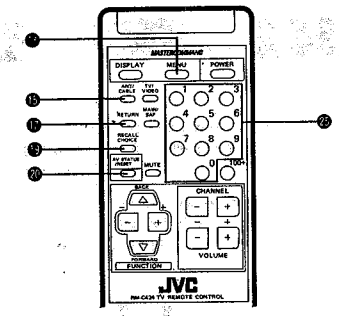
(No.50387) 7

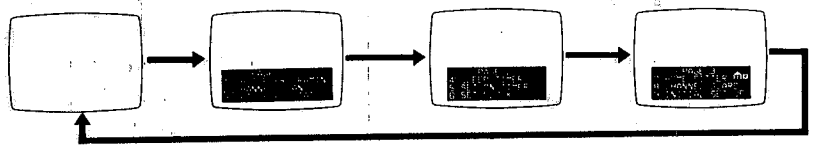
AV-2650S

MENU BUTTON

The "MENU" button selects a list of functions that can be programmed for operating the TV more conveniently. This function is possible only on the Remote Control.

- Press MENU button ⑨ on the Remote Control to display the list of programmable convenience functions on the screen. The "MENU" consists of 3 pages. Press the MENU button repeatedly to display the pages in the sequence below.
- Press numbers "1" through "9" on 10-Digit Keypad ⑫ to select the corresponding function in the numbered "MENU".





PAGE-1

1. CHOICE PROGRAMING

This function enables storing up to 5 frequently-viewed channels as "CHOICE channels", allowing immediate, direct access to the channel of your choice using the RECALL CHOICE button ⑬ .

1) While in the channel select mode (either "CHANNEL" or "CABLE" mode), determine the channel you wish to preset as a CHOICE channel and display it on the screen.
(For example, press "0" and "9" to display "CHANNEL 09").

2) With "PAGE-1" MENU displayed on the screen, press "1" of 10-Digit Keypad ⑫ .
The display will show:

3) Press a number (1 – 5) on 10-Digit Keypad ⑫ for the CHOICE channel number you wish to preset. Then, the following display will appear.
(For example, press "1" for storing "CHANNEL 09" as the "CHOICE 1" channel.)

4) With this display, you can store the TV station's call letters for handy reference along with its channel number. (Up to 4 letters can be stored.) If you choose to store the call letters, press "1". The following display will appear.

- If you choose not to store call letters, press "2" of the 10-Digit Keypad. The CHOICE LIST will appear to show that the CHOICE PROGRAMING mode has been disengaged.

5) Press the FUNCTION FORWARD/BACK buttons for selecting each of the call letters to be stored. Available characters include the alphanumeric characters (26 English-language letters and 10 numerals), plus various punctuation marks (period, comma, etc.). Then, move the cursor to the next letter position by pressing the FUNCTION (–/+) buttons on the Remote Control. When finished selecting up to 4 call letters, press "1".
(For example, if you store the letters "JVC", keep the FUNCTION FORWARD or BACK button pressed until the letter "J" appears. Then, press the FUNCTION (+) button to move the cursor one letter position to the right. Press FUNCTION FORWARD or BACK to select the letter "V", then move the cursor to the right again with FUNCTION (+). In the same way, select "C", then press "1" to end the operation.)
The CHOICE LIST is displayed for a few seconds.

6) Repeat steps 1) through 5) to preset up to 5 CHOICE channels.

RECALL CHOICE Button

- Simply press RECALL CHOICE button ⑬ anytime you want to call up the list of preset CHOICE channels for convenient direct CHOICE channel selection.
While the list is on the screen, press the corresponding number of 10-Digit Keypad ⑫ to select the preferred channel.

2. CHANNEL SCAN

This feature allows automatic scanning, in ascending order, of the channels which have been stored following the procedures of "9. INITIAL SET-UP" (described on page 15).

1) With "PAGE-1" MENU displayed on the screen, press "2" of 10-Digit Keypad ⑫ .
- All memorized channels (either "CHANNEL" or "CABLE" mode) will now be scanned sequentially in ascending order beginning with the channel that the TV is tuned to. Scanning will stop automatically when the original channel is reached. "SCAN STOP" appears to show the CHANNEL SCAN mode has finished.

2) Press any button on the Remote Control, if you wish to stop scanning at a certain channel before the original channel is reached.
To resume scanning, press MEMU button ⑨ and then "2" of 10-Digit Keypad ⑫ .

Notes:
- When the TV is in the "CABLE" mode, the "CABLE" indication appears on the screen instead of "CHANNEL".
- For changing memorized channels, see "9. INITIAL SET-UP".
- If you wish to start CHANNEL SCAN at a specific channel, first select the broadcast mode (CHANNEL or CABLE) then that channel number, and then follow instructions on the left.
- While actual CHANNEL SCAN is being performed, all front panel buttons become inoperable.

3. SET-UP AV STATUS

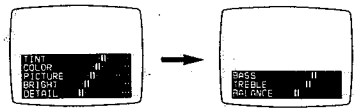
Your TV set incorporates the AV STATUS memory that can store 2 variations for preset picture/sound adjustments, allowing you to change the picture/sound tone/speaker balance to your preference, depending on each source.

1) With "PAGE-1" MENU displayed on the screen, press "3" of 10-Digit Keypad ⑫ . The display will show:

2) Make picture adjustments to your preference. Use the FUNCTION BACK/FORWARD buttons to select the item, and use FUNCTION (–/+) buttons to adjust each item. If you also wish to make sound adjustments, press "1" to advance the adjustment mode display. The following display will appear. (Press "1" again to return to the picture adjustment display.)

3) Make sound adjustments to your preference. Use the FUNCTION BACK/FORWARD buttons to select the item, and use FUNCTION (–/+) buttons to adjust each item. When finished, press "2". The following display will appear.

4) Press "1" to store the setting as the "AV STATUS A". (Press "2" to store it as the "AV STATUS B".) Then the picture and sound adjustment settings (items and their reference scales) appear for a few seconds each.



5) Repeat steps 1) through 4) for making another AV STATUS setting.

Note: When you wish to choose the preset AV STATUS, just press the AV STATUS/RESET button ⑰ to choose either set of AV STATUS adjustments. For details, see "AV STATUS/RESET Button" on the next page.

AV STATUS/RESET button

Use this button for choosing the preset AV STATUS or for resetting the picture/sound adjustment items.
Press AV STATUS/RESET button ㉑ on the Remote Control. The following display appears.

- Another pressing of the AV STATUS/RESET button resets all previously adjusted items to their center positions.

1. AV STATUS A

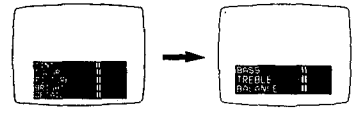
Press "1" of 10-Digit Keypad ㉒ for selecting AV STATUS A. The picture and sound change as preset for "AV STATUS A". Then the picture and sound adjustment settings (items and their reference scales) appear for a few seconds each.

2. AV STATUS B

Press "2" for selecting AV STATUS B. The picture and sound change as preset for "AV STATUS B". Then the picture and sound adjustment settings (items and their reference scales) appear for a few seconds each.

3. RESET

Press "3" when you wish to reset all adjusted items (TINT, COLOR, PICTURE, BRIGHT, DETAIL, BASS, TREBLE and BALANCE) back to their center positions at the same time. The on-screen displays appear and change as follows.



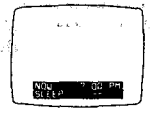
Note: While in this mode, the setting of the AV STATUS cannot be cancelled.

PAGE-2

4. SLEEP TIMER

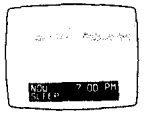
The "SLEEP TIMER" feature allows you to turn off your TV automatically at a preset time.

1) With "PAGE-2" (or "PAGE-1" or "PAGE-3") MENU displayed on the screen, press "4" of 10-Digit Keypad ㉒.
The display will show:



- If the built-in clock has not been set to operate properly, the SLEEP TIMER will not function. In this case, the following display will appear on the screen to show that the clock requires adjustment.

Press "1" (YES) of the 10-Digit Keypad to adjust the clock. (If "2" (NO) is pressed, the warning message "YOU CANNOT OPERATE SLEEP TIMER!!" is displayed.)
Set the built-in clock. (See "6. SET CLOCK" on page 12 for details.) When the clock is adjusted, the message "THANK YOU" appears. Then, the following display appears to show that the SLEEP TIMER is now ready to be set.



2) Press the numbers on the 10-Digit Keypad to set the desired switch-off time. The SLEEP TIMER can be set for up to 11 hours 59 minutes from the current time.
For example, if it is now 7:00 PM, and you want the TV to switch off automatically at 9:00 PM, press "9", "0" and "0". (The "AM/PM" setting is done automatically.) The selected time of "9:00 PM" appears.

- When you select "1" for hour setting (for example, "1:05 AM"), remember to press "0" first, then press "1", "0" and "5".

3) To cancel the SLEEP TIMER setting, key in the current time. (The current time setting of the TV's built-in clock.)

Notes:

- If an invalid time is selected (for example: "5:87"), it will be rejected and the SLEEP TIMER must be reset properly.
- While the SLEEP TIMER is activated, if the POWER button is pressed to turn the power off and on again, the SLEEP TIMER will be cancelled.
- While the SLEEP TIMER is activated, if the power is disconnected (such as in the case of power failure,etc.) and reapplied later, the TV is turned off. When disconnected only for a couple of minutes, the SLEEP TIMER is reactivated; however, it turns the TV off later than the set time by the amount of time of interruption.
- The SLEEP TIMER may turn off the TV a little earlier than the preset time.
- When the remaining time reaches 1 minute, the message, "GOOD NIGHT", will be displayed and continue to blink until the power turns off automatically.

(No.50387)9

5. SET ON TIMER

The "ON TIMER" feature allows you to turn on your TV automatically at a preset time and on a specific channel. The ON TIMER is available for 2 different settings.

With "PAGE-2" (or "PAGE-1" or "PAGE-3") MENU displayed on the screen, press "5" of 10-Digit Keypad ㉒. The display will show:

- At this time, if the display of "POWER INTERRUPTED/ WOULD YOU SET CLOCK FIRST?" (which may appear during the SLEEP TIMER procedure) appears, it shows that the clock is not operating, and the ON TIMER will not function.
Press "1" (YES) to set the clock. (If "2" (NO) is pressed, the warning message "YOU CANNOT OPERATE ON TIMER!!" is displayed.)
Set the clock. See "6. SET CLOCK" on page 12 for details regarding clock setting. After the clock has been set, the message "THANK YOU!!" appears to show that the clock has just been adjusted and the ON TIMER is now ready to be set.

Two different settings are possible. Press "1" or "2" to select the setting position. The display will show:

- The second from the bottom line shows the preset time if already previously set.

1) SET

Press "1" to start the ON TIMER for turning the TV on automatically at the preset time shown. "<YES>" appears to show that the ON TIMER has started.

2) CANCEL

Press "2" to cancel the setting. "<NO>" appears to show that the ON TIMER has been cancelled.

3) CHANGE

Press "3" to re-adjust the setting. Then, the following display appears.

Press the numbers on the 10-Digit Keypad to set the desired switch-on time. For example, if you want the TV to switch on automatically for CHANNEL 12 at 7:00 AM, press "7", "0" and "0". (When you select "1" for hour setting, remember to press "0" first, then press "1".) The selected time of "7:00" appears and immediately the display changes to:

Then, press "1" to select the "AM" setting. (Press "2" to select the "PM" setting.) Then, the following display appears. Press "1" and "2" for specifying "CHANNEL 12"

Now the following display appears on the screen to show the ON TIMER is set to "7:00 AM, CHANNEL 12" with the < YES > indicating the ON TIMER has started. Finally, press POWER button ❶ to turn the power off. POWER/ ON TIMER indicator ❷ remains lit to show that the ON TIMER is in operation.

Notes:

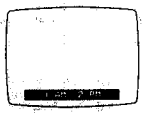
- If an invalid time is selected (for example: "17:70"), it will be rejected and the ON TIMER must be reset properly.
- First select the broadcast mode (CHANNEL or CABLE) of the channel you wish to set for the ON TIMER with ANT/ CABLE button ㉓ on the Remote Control before entering the ON TIMER mode, since broadcast mode switching while in the ON TIMER will cancel the mode.
- After the ON TIMER has been properly set, it functions only once for each setting (up to 2 settings are possible) to turn on the TV's power. (It does not operate repeatedly every day at the same time as a serial timer.)
- Once the ON TIMER turns the TV on automatically, if the TV is not operated in any way, after 2 hours the TV will turn off automatically for safety. A single adjustment, even audio level adjustment or channel selection, will cancel this switch-off function.
- While the ON TIMER is activated, if the power is disconnected (such as in the case of power failure, etc.) and reapplied later, the ON TIMER is cancelled. When disconnected only for a couple of minutes, the ON TIMER is reactivated; however, it turns the TV on later than the set time by the amount of time of interruption.
- If the channel which has already been set as a "Guarded Channel" is selected, that channel is rejected and cannot be set for the ON TIMER. (For details of the Guarded Channels, refer to page 13.)

6. SET CLOCK

Your TV has a built-in clock. Set the clock as follows.

1) With "PAGE-2" (or "PAGE-1" or "PAGE-3") MENU displayed on the screen, press "6" of 10-Digit Keypad ⑥. The display will show:

2) Then, press the numbers (be sure to key in 4 digits) on the 10-Digit Keypad to set the current time. For example, if the present time is 7:35 PM, press "7", "3" and "5". Then, the display changes to:



3) Press "2" to select the "PM" setting. (Press "1" to select the "AM" setting.) Then, the display changes to the following to show the current time is set and the clock starts operating.

Notes:

- If an invalid time is selected (for example: "17:70"), it will be rejected and the built-in clock must be reset properly.
- If you wish to set the clock precisely, in step 3) above, press "2" (or "1") at the same instant of a time signal.
- The built-in clock may loose time depending on the manner in which the TV is used or the frequency of the power source. If the time difference becomes great, re-adjust the clock.
- If the power is disconnected (such as in the case of a power failure, etc.), and reapplied later, the clock will stop operating. (The clock status can be checked on screen. Press the DISPLAY button. If the clock has stopped, the message "CLOCK STOPPED" is displayed instead of the current time. See "DISPLAY Button" on page 17 for details.) When disconnected only for a couple of minutes, the clock is reactivated; however, it will be later than the actual time by the amount of time of interruption.

PAGE-3

7. HOME SITTER

The "HOME SITTER" feature enables the TV to be turned on and off automatically at preset times every day.

With "PAGE-3" (or "PAGE-1" or "PAGE-2") MENU displayed on the screen, press "7" of 10-Digit Keypad ⑦. The display will show:

- At this time, if the display of "POWER INTERRUPTED/ WOULD YOU SET CLOCK FIRST? appears, it shows that the clock is not operating, and the HOME SITTER will not function.

  Press "1" (YES) to set the clock. (If "2" (NO) is pressed, the message "YOU CANNOT OPERATE HOME SITTER!!" is displayed.)

  Set the clock. See "SET CLOCK" above for details regarding clock setting. After setting the clock, the message "THANK YOU!!" appears to show that the clock has just been adjusted and the HOME SITTER is now ready to be set.

1) SET

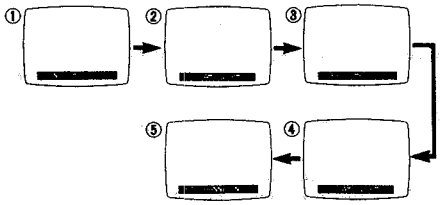
Press "1" to place the HOME SITTER in standby. The ON/OFF time and channel number which have been previously set will be displayed. When the POWER switch is pressed to turn the TV off, the POWER/ON TIMER indicator ⑨ lights and "YES" appears on the screen to show that the HOME SITTER is in operation.

2) CANCEL

Press "2" to cancel the HOME SITTER. "NO" appears to show that the HOME SITTER has been cancelled.

3) CHANGE

Press "3" to re-adjust the HOME SITTER setting. Follow the on-screen displays to set the switch-on time, switch-off time and channel number, using the 10-Digit Keypad.



①Set the switch-on time.
②Select "AM" or "PM".
③Set the switch-off time.
④Select "AM" or "PM".
⑤Set the channel number.

When the channel number is set, the display will show:

- This display shows that the HOME SITTER is set to switch the TV on at 6:30 PM, switch it off at 11:00 PM and the channel to be received is "CABLE 13".

Notes:

- If an invalid time or channel number is selected, it will be rejected and it must be reset properly.
- First select the broadcast mode (CHANNEL or CABLE) of the channel you wish to set for the HOME SITTER with ANT/CABLE button ⑧ on the Remote Control before entering the HOME SITTER mode, since broadcast mode switching while in the HOME SITTER will cancel the mode.
- If you wish to reset the switch-on time only, stop keying in data (waiting until the on-screen display disappears) after keying in the AM/PM setting, or press keys other than 10-Digit Keypad. And, if you wish to reset the switch-on and switch-off time only, the procedure is the same.
- The function that automatically turns the TV off for the ON TIMER, if no TV operation is performed after 2 hours, does not operate for the HOME SITTER.
- If the power is disconnected (such as in a power failure, etc.), and reapplied later, the HOME SITTER will be cancelled. When disconnected only for a couple of minutes, the HOME SITTER is reactivated; however, it turns the TV on and off later than the set time by the amount of time of interruption.
- If the channel which has already been set as a "Guarded Channel" is selected, that channel is rejected and cannot be set for the HOME SITTER. (For details of the Guarded Channels, see below.)

8. CHANNEL GUARD

The "CHANNEL GUARD" feature allows you to assign an "ID number" to specific channels of your choice, making them "Guarded Channels". This prevents these specific channels from being selected, unless the "ID number" is keyed in.

First select a channel you wish to set as a Guarded Channel. With "PAGE-3" (or "PAGE-1" or "PAGE-2") MENU displayed on the screen, press "8" of 10-Digit keypad ⑧. The display will show:

Then, press "0". The display changes to:

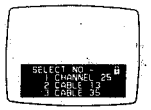
- Channel numbers displayed are the Guarded Channels, if already previously set.

1) SET

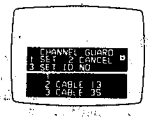
Press "1". The display changes to:

For example, if the current channel being received is "CHANNEL 25", and you wish to store this channel as Guarded Channel 1, then press "1". The display changes to show that CHANNEL 25 is now set as Guarded Channel 1.

2) CANCEL
Press "2" to cancel the Guarded Channel. The display will show:



With this display on the screen, press the number of the Guarded Channel you wish to cancel from the list. For example, if you wish to cancel CHANNEL 25 (in this case, Guarded Channel 1) from the list, press "1". Then the display changes to show that CHANNEL 25 (Guarded Channel 1) has been cancelled.



3) SET ID NO.
Press "3" to set the ID number. The display will show:

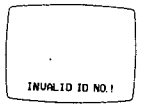
Press any 3 digits you wish to be the ID number. When completed, "ENTERED" appears to show that the ID number you have just keyed in is set.

Viewing Guarded Channels

1) Select the Guarded Channel. (If the Guarded Channel you wish to view is CHANNEL 25, press "2" and "5".) Then, the following display appears:

2) Key in the ID number using the 10-Digit Keypad. The channel appears.

3) If the keyed-in ID number is incorrect, the display shows:



And the Guarded Channel you have selected cannot be seen.

Notes:

- If you wish to change the ID number, follow the steps of "3) SET ID NO.".
- If the power is disconnected (such as in the case of power failure, etc.), and reapplied later, the ID number is reset to "000".
- When performing the CHANNEL SCAN function, or selecting channels using CHANNEL (-/+) buttons ⓳ , the Guarded Channels are skipped.
- In the following cases, the Guarded Channel can be seen without keying in the ID number:
  - =When you press the RETURN button ⓯ from a channel which has been selected immediately after viewing a Guarded Channel.
  - =When you press ANT/CABLE button ⓰ from a channel of a different broadcast mode (CHANNEL or CABLE) which has been selected immediately after viewing a Guarded Channel.
  - =When you press CHANNEL (-/+) buttons ⓳ on the Remote Control or CHANNEL/LEVEL (-/+) buttons ❹ on the front panel, while in the MANUAL PROGRAM mode of the INITIAL SET-UP (on MENU PAGE-3), if the selected channel which has already been ADDed happens to also be a Guarded Channel.
  - =When you press "4" (CHANNEL UP) or "5" (CHANNEL DOWN) of the 10-Digit Keypad while in the MANUAL PROGRAM mode of the INITIAL SET-UP, if the Guarded Channel happens to also be the next higher or lower channel following the one to which you are presently tuned.
  - =While in the AUTO PROGRAM mode of the INITIAL SET-UP, if the AUTO PROGRAM is interrupted immediately when a Guarded Channel appears.
  - =When the channel which has already been set for the ON TIMER or HOME SITTER is set as a Guarded Channel.
- If you forget the ID number which you have set, reset it.

9. INITIAL SET-UP
The INITIAL SET-UP feature allows you to perform basic settings for the TV status. This consists of Channel Memory (Auto/Manual), Message Style and Noise Mute.

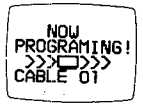
Note: When performing Channel Memory (MANUAL PROGRAM), select an appropriate broadcast mode (either "CHANNEL" or "CABLE") before you select the INITIAL SET-UP mode.

With PAGE-3 (or PAGE-1 or PAGE-2) MENU displayed on the screen, press "9" of 10-Digit Keypad ㉑ . The display will show:

Press appropriate 10-digit key to select the item.

1) AUTO PROGRAM
This function allows memorizing the channels automatically to match the TV broadcasts and cable channels of your area. The memorized channels can be selected by the CHANNEL (-/+) buttons ⓳ on the Remote Control or CHANNEL/LEVEL (-/+) buttons ❹ on the front panel, or in the CHANNEL SCAN mode, while skipping channels where there are no broadcasts.

Press "1" of the 10-Digit Keypad. The following display will appear and the program set-up procedure begins automatically.



When tuned to a channel in which a TV program is broadcast, the following display appears and this channel is memorized.

When the AUTO PROGRAM procedure (scanning and memorizing) is completed, it will be indicated by the following display.

Notes:

- If the broadcast signals are weak, the channel may not be memorized. In this case, perform the MANUAL PROGRAM procedure.
- The AUTO PROGRAM procedure takes approximately 4 minutes. If you wish to stop this procedure before completion, press any button on the remote control.

2) MANUAL PROGRAM
Similar to the AUTO PROGRAM function above, this is for memorizing channels, but it is performed manually. The resulting Manual Programming is also effective when performing up/down channel selection or CHANNEL SCAN.
Press "2". The display will show:

The current tuned-in channel

Simply follow the on-screen instructions.

Note: First select the broadcast mode before entering this MANUAL MEMORY mode.

1) Press "1" (ADD) to add this channel in memory. A bar "-" will appear between the broadcast mode (CHANNEL or CABLE) and the channel number to show that the channel has been memorized.
2) Press "2" (ERASE) to erase this channel from memory, if you do not wish to preset it in memory or if no TV station is broadcasting on it. The bar between the broadcast mode and channel number will disappear.
3) Press "4" (CHANNEL UP) or "5" (CHANNEL DOWN) to select the next higher or lower channel.
4) Press "3" (END) when you have stored all required channels in memory.
5) When you wish to store channels of the other broadcast mode, select the mode first, then repeat steps 1) through 4).
   - In step 3) above, if selecting channels is difficult, press the CHANNEL (-/+) buttons on the Remote Control.
   - Be sure to perform these operations using the Remote Control.

3) MESSAGE STYLE

This function is for switching the black background of the on-screen display on and off (except for channel numbers and clock time.) Press "3". The display will show:

Press "1" to select the on-screen display mode with a black background.

(VOLUME indication)

Press "2" to select the on-screen display mode without a black background.

(VOLUME indication)

4) NOISE MUTE

The NOISE MUTE feature allows replacing the "snowy" screen of vacant non-broadcast channels with a blue-blank screen; and, at the same time, muting the noisy sound.

Press "4". The display will show:

Press "1" to select the Noise Mute mode for a blue-blank screen with no sound.

Press "2" to release the mode. Screen is normal (without blue-blank screen) and sound can be heard.

Note: The Noise Mute mode can be activated only when either no signal is being input or when a weak signal is being received.

- If you wish to view a TV program having a weak broadcast signal, release the Noise Mute mode to prevent it from being activated.
- If you use an antenna system, before adjusting it (extending, rotating, etc.), release the Noise Mute mode to prevent it from being activated when the signal condition changes.
- When playing back VCR recordings or the like, picture and sound muting conditions might continue to occur for a few seconds after engaging the Play mode. Release the Noise Mute mode when necessary.
- When the Noise Mute mode is engaged, it is also applied to the output signals, both from LINE OUT connectors and from AUDIO OUT (VARIABLE) connectors. Release the Noise Mute mode to prevent it from having effect when connecting external components to the TV.

MASTER COMMAND SELF-DEMONSTRATION FEATURE

Your TV has a self-demonstration feature for the incorporated MASTER COMMAND system, demonstrating automatically all major functions of the MASTER COMMAND.

With PAGE-1 (or PAGE-2 or PAGE-3) MENU displayed, press "0" twice of the 10-Digit Keypad ("0-0"), or press the FUNCTION and VOLUME (–) buttons on the front panel simultaneously. The demonstration automatically begins in the following order. If you wish to stop the demonstration anytime while it is running, press any key on the Remote Control or on the front panel.

Note: The above display might appear slightly different on your TV set. However, all self-demonstration operations are exactly the same regardless of this initial display.

Demonstration procedure

SET CLOCK*
↓
Picture adjustment ←
↓
RESET (picture adjustment)
↓
CHOICE PROGRAMING
↓
SET-UP AV STATUS
↓
SLEEP TIMER
↓
SET ON TIMER
↓
HOME SITTER
↓
CHANNEL GUARD
↓
MESSAGE STYLE ——

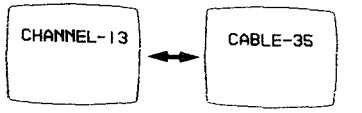
*The SET CLOCK mode can operate only when the built-in clock is stopped.

Note: Operating this function adjusts the clock, timer settings, and all other functions to specific demonstration settings. Therefore, re-adjustment of these settings is required once the demonstration has been executed.

MORE USEFUL FUNCTIONS

RETURN Button

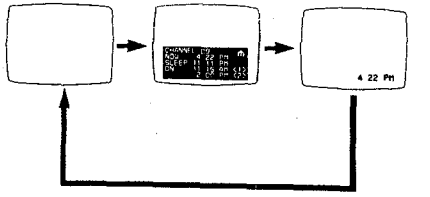
Press RETURN button ⓱ on the Remote Control.
The previously viewed channel will appear on the screen.
Press RETURN again to switch back to the original channel.
Repeatedly pressing RETURN switches between these two channels.



DISPLAY Button

Press DISPLAY button ⓭ on the Remote Control. The channel number of the program you are now viewing, the SLEEP TIMER/ON TIMER settings, HOME SITTER setting, and the current time are displayed in the order as shown on the right by each pressing of the DISPLAY button. The current time remains displayed on the screen until the DISPLAY button is pressed again.

Note: If the SLEEP TIMER and/or ON TIMER and/or HOME SITTER is cancelled, their settings will not be displayed.



MUTE Button

Press MUTE button ㉑ on the Remote Control.
The sound of the TV program being viewed will be reduced to zero and "VOLUME 0" will appear on the screen.
Press again to restore the sound.

Note: Changing the audio volume or channel number also restores the sound.

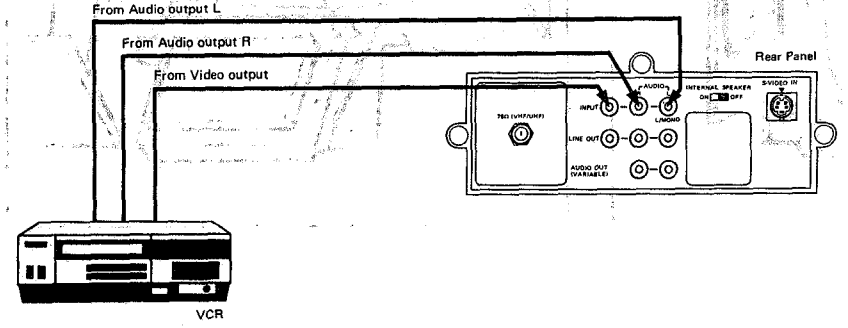
CONNECTING TO EXTERNAL EQUIPMENT

- Prior to making any connections to your TV set, be sure to turn the POWER off.
- For a more detailed understanding of each connection, it is recommended that you read the instruction manual for each connected component.
- If you use video or audio equipment placed too near the Monitor/Receiver, picture and/or sound may become distorted due to interference between these components. In such a case, separate each piece of equipment at a sufficient distance.
- The following shows examples for connecting external equipment.
- Do not connect another audio source to the same speaker to which the TV set is connected, otherwise damage may result to the amplifier of the TV set or to that of the other audio source.

1 VIDEO/AUDIO INPUT connectors

- To view a connected video source, press TV/VIDEO button ⓫ on the Remote Control to engage the VIDEO mode.

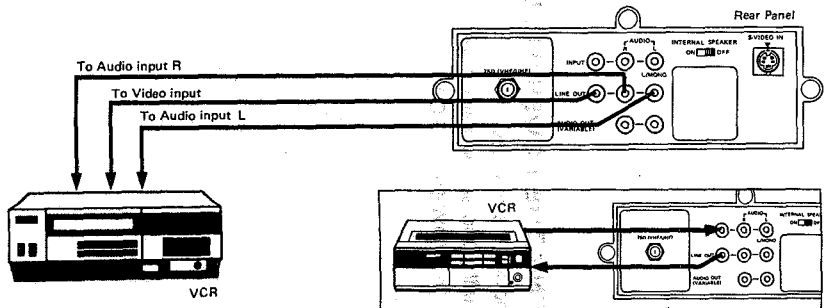
Notes:
- If the connected video equipment outputs monaural audio, connect to the AUDIO L/MONO (left channel) connector. Sound will be output from both right and left speakers.
- When the S-VIDEO IN connector is used, this VIDEO connector function becomes inoperable.

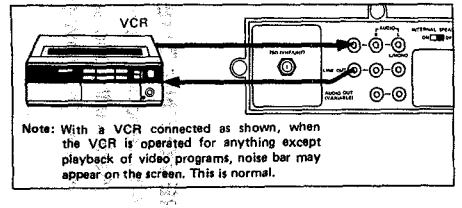


2 LINE OUT connectors

- The video and audio signals available at these connectors are the same as the source presently being monitored on the TV.
  This is convenient for VCR connection.

Note: Video signals that are input to S-VIDEO IN connector cannot be output from VIDEO connector of LINE OUT connectors.

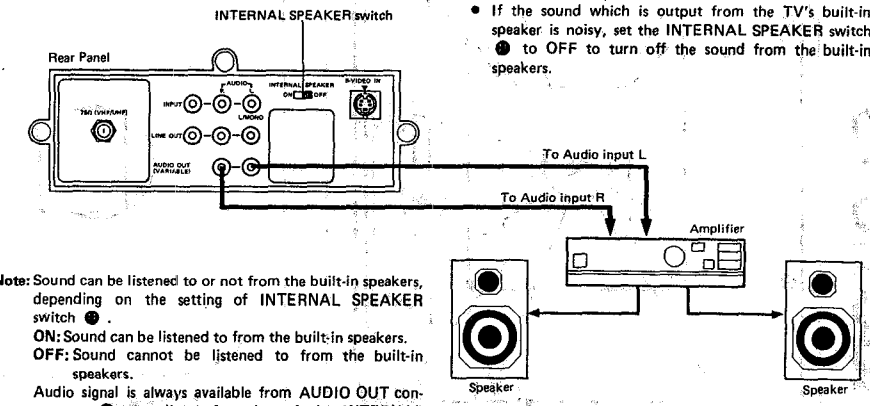




Note: With a VCR connected as shown, when the VCR is operated for anything except playback of video programs, noise bar may appear on the screen. This is normal.

3 AUDIO OUT (VARIABLE) connectors

- The audio signals available at these connectors are the same as the audio source of the program being monitored on the TV screen.



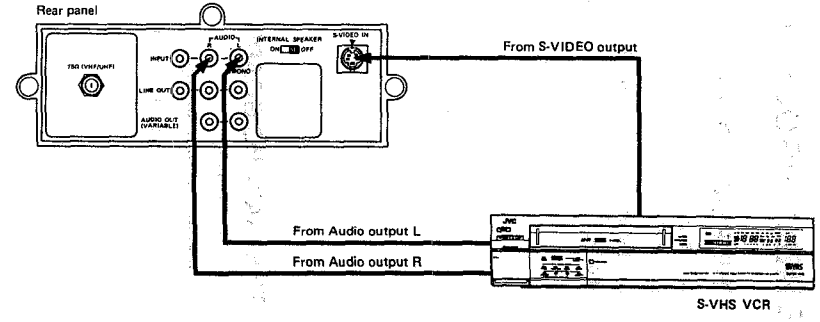
Note: Sound can be listened to or not from the built-in speakers, depending on the setting of INTERNAL SPEAKER switch ❿.
ON: Sound can be listened to from the built-in speakers.
OFF: Sound cannot be listened to from the built-in speakers.
Audio signal is always available from AUDIO OUT connectors ⓭ regardless of setting of the INTERNAL SPEAKER switch.

- Connect to a stereo amplifier to these connectors to listen to the sound through external speakers connected to the amp. The audio output level can be adjusted via the VOLUME (–/+) buttons ❽ on either the Remote Control or front panel.
- If the sound which is output from the TV's built-in speaker is noisy, set the INTERNAL SPEAKER switch ❿ to OFF to turn off the sound from the built-in speakers.

4 S-VIDEO IN connector

- S-VIDEO IN connector is for the separated Y (luminance) and C (chrominance) video signals conforming to the NTSC system, ideal for connection of an S-VHS (Super VHS) VCR.
- Connect the audio output cable to AUDIO INPUT connectors.
- Press TV/VIDEO button ⓫ on the Remote Control to engage the VIDEO mode to view pictures from the S-VHS VCR.

Note: When equipment is connected to this connector, the VIDEO INPUT connector function becomes inoperable.



(No.50387) 13

AV-2650S

SPECIFIC SERVICE INSTRUCTIONS

DISASSEMBLY PROCEDURE

REMOVING THE REAR COVER

1. Unplug the power supply cord and remove the eleven screws marked Ⓐ shown in Fig. A.
   When reinstalling the rear cover, carefully push it inward after inserting the main PC board into the rear cover groove.

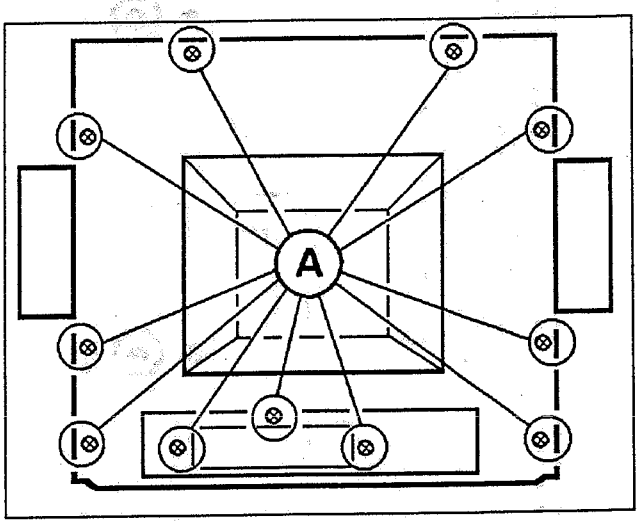


Fig. A

REMOVING THE MAIN PC BOARD

* After removing the rear cover,

1. Remove the two screws marked Ⓐ shown in Fig. B.
2. Withdraw the PC board backward along the rail. (Fig. B)

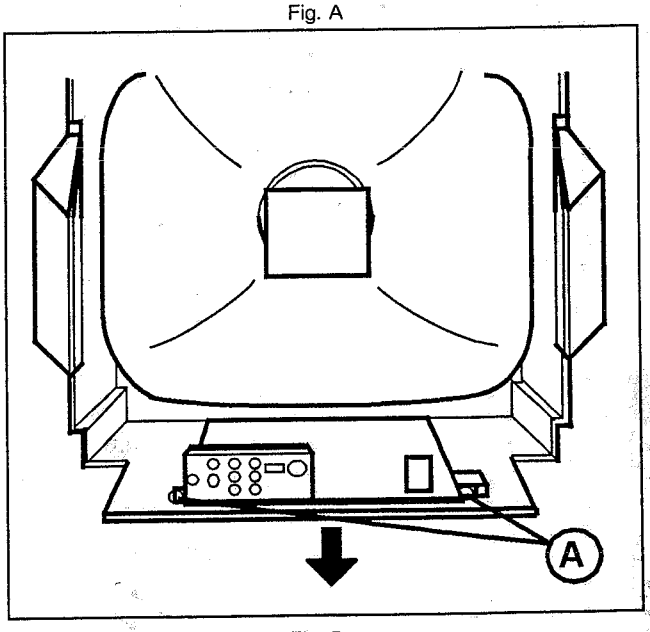


Fig. B

REMOVING THE POWER P.C. BOARD

* After removing the rear cover,

1. Remove the two screws marked Ⓐshown in Fig. C, and, then remove the POWER PC BOARD straight toward the arrow.

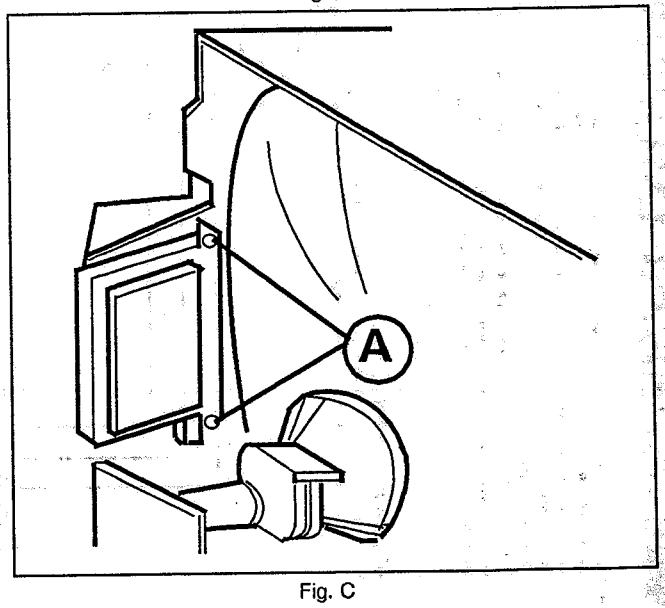


Fig. C

REMOVING THE POWER TRANSFORMER

1. Unscrew the screw marked Ⓐ shown in Fig. D.
2. Withdraw the power transformer backward.

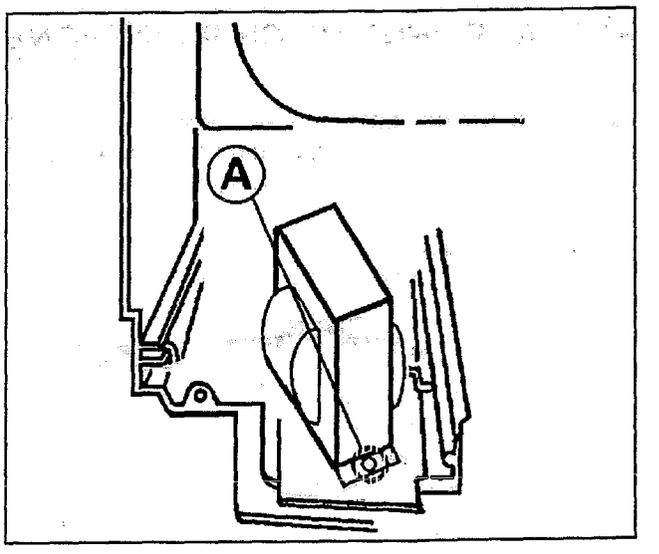


Fig. D

SETTING UP THECHASSIS FOR CHECK /REPAIR

As shown in Fig. E, set the removed chassis upright.
When conducting a check with power supplied, be sure to c onfirm that the CRT earth wire is connected to the CRT socket board and the chassis.

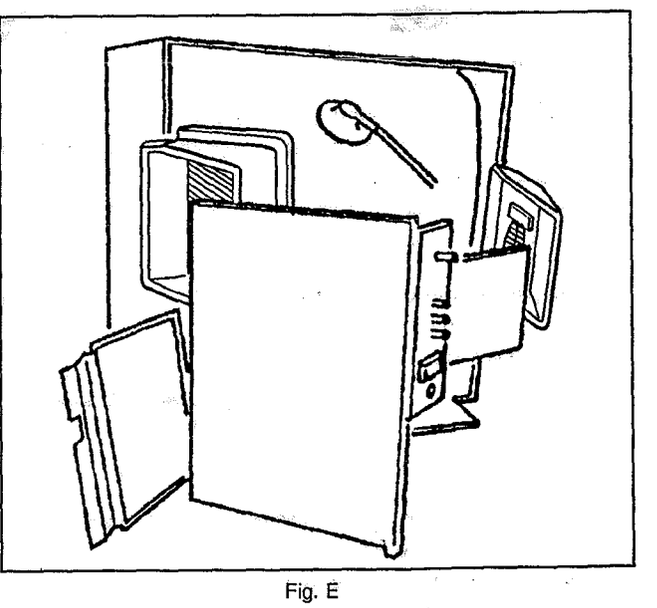


Fig. E

WIRE CLAMPING AND CABLE TIES

Be sure to clamp the wire.
Never remove the cable tie used for tying the wires together.
Should it be inadvertently removed, be sure to tie the wires with a new cable tie.

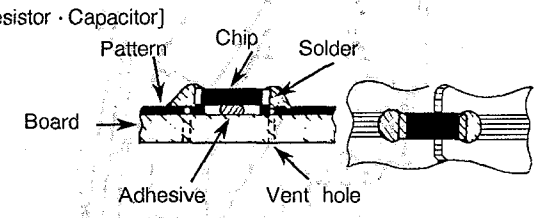
REPLACEMENT OF CHIP COMPONENTS

- **CHIPS ARE NOT USED ON CERTAIN MODELS. REFER TO THE DESCRIPTIONS ON THIS PAGE ONLY WHEN WORKING ON MODELS ON WHICH CHIPS ARE EMPLOYED.**

Replacement of the chip on printed circuit board can be performed easily as follows.

1 **When mounted**

[Resistor · Capacitor]

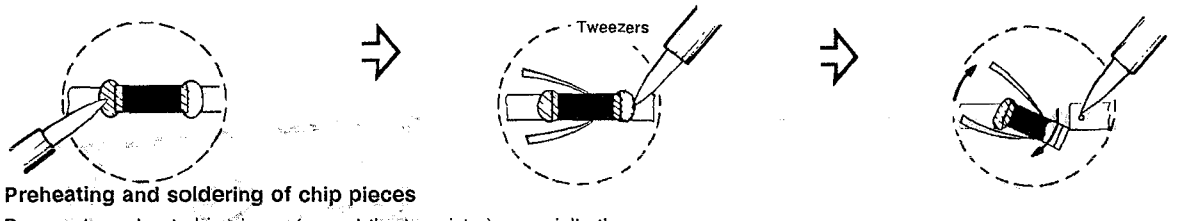


2 ***Removal of the chip***

(1) Remove either of the soldered contacts.

(2) Hold the chip with tweezers and remove the other contact.

(3) Work the chip free from the adhesive with tweezers.

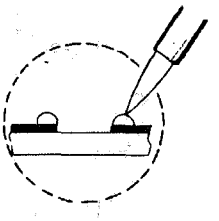


3 **Preheating and soldering of chip pieces**

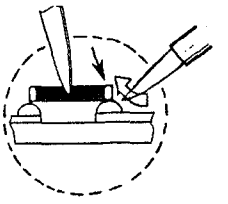
Be sure to preheat chip pieces (except the transistor) especially the capacitor before soldering with hot air, about 150°C (hair dryer or such can be used) for about 2 minutes. Then, immediately solder with an iron of about 30W.

4 **Replacing the chip pieces**

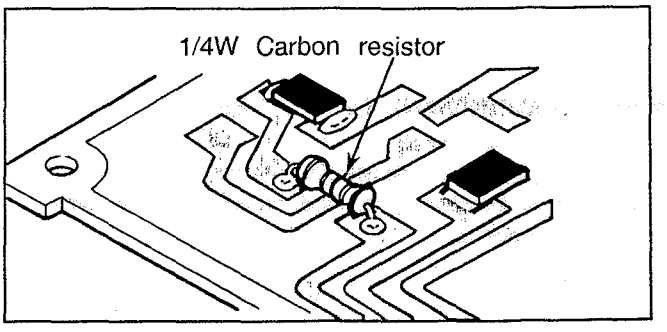
(1) Apply the solder to the board first.



(2) Hold the chip with tweezers and solder it in place, hold the iron at a 45° angle when soldering.

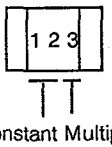


- Discrete parts can be substitutionally mounted as shown in the figure on the right.
  Mounting is also possible by passing the wires from the board front side (parts side) through the chip soldering hole (vent hole of registration part).
  Substitute parts are as follows.
  - Chip Metal Glaze Resistor
    →Carbon Resistor 1/4W ±5%
  - Chip Ceramic Capacitor
    →Ceramic Capacitor 50V ±5%



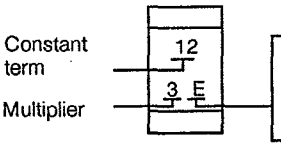
- Decoding of chip parts constant terms

<Chip Metal Glaze Resistor>



Constant term: 12
Multiplier: 3
12×10^3 = 12000Ω = 12kΩ

<Chip Ceramic Capacitor>



K, M, Z, P · · · · · Tolerance of ordinary type

C, P, R, S, T, U · · Temperature coefficient of temperature compensation type

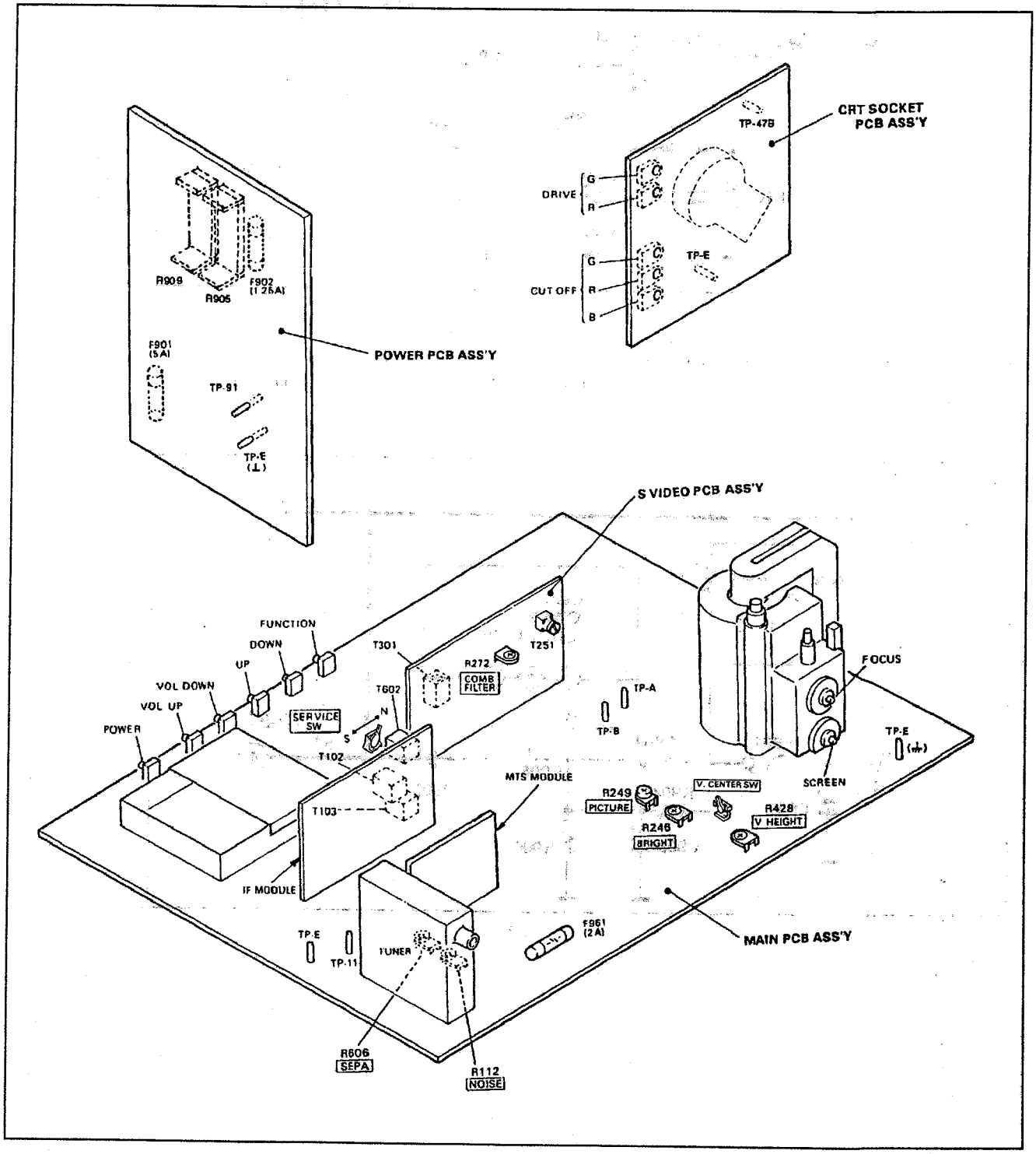
12×10^3 = 12000pF = 0.012μF

SERVICE ADJUSTMENT

TOOLS AND FIXTURES FOR ADJUSTMENT

- DC VOLTMETER
- OSCILLOSCOPE
- PATTERN GENERATOR(NTSC)
- TV MULTI CHANNEL SOUND GENERATOR.

ADJUSTMENT LOCATION



HOW TO CHECK THE HIGH VOLTAGE HOLD DOWN CIRCUIT

1.High voltage hold down circuit.

After repair of the high voltage hold down circuit shown in Fig.1,this circuit shall be checked to operate correctly.

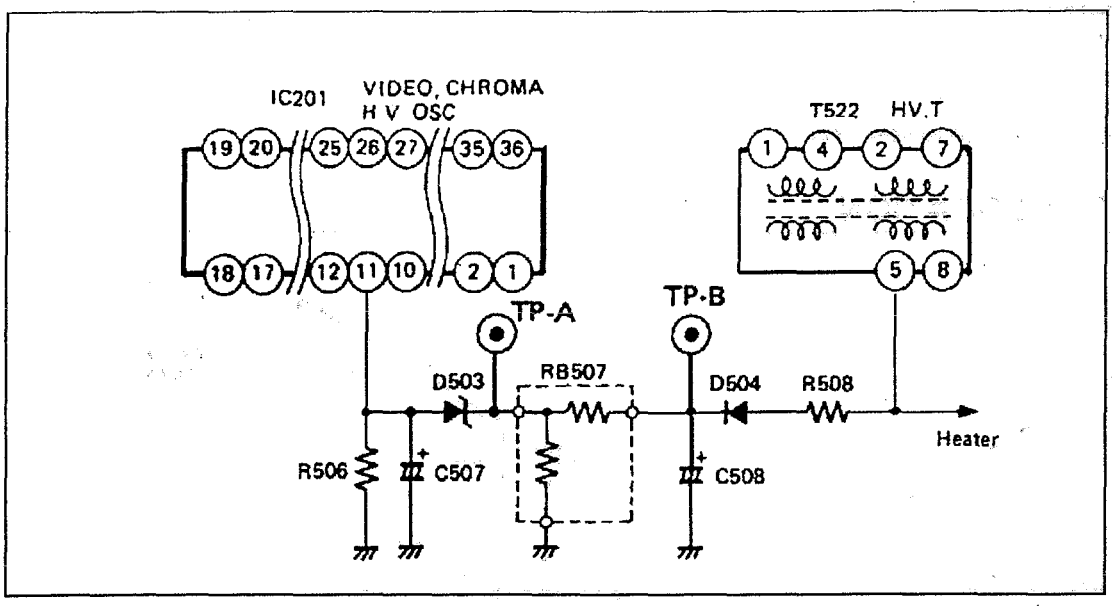


Fig.1

2.Checking method of the high voltage hold down circuit.

(1)Make the short circuit across R905,330 Ω 15W UNF R (shown in Fig.2, ⋯⋯) under normal operating condition.

(2)Confirm the picture goes out.

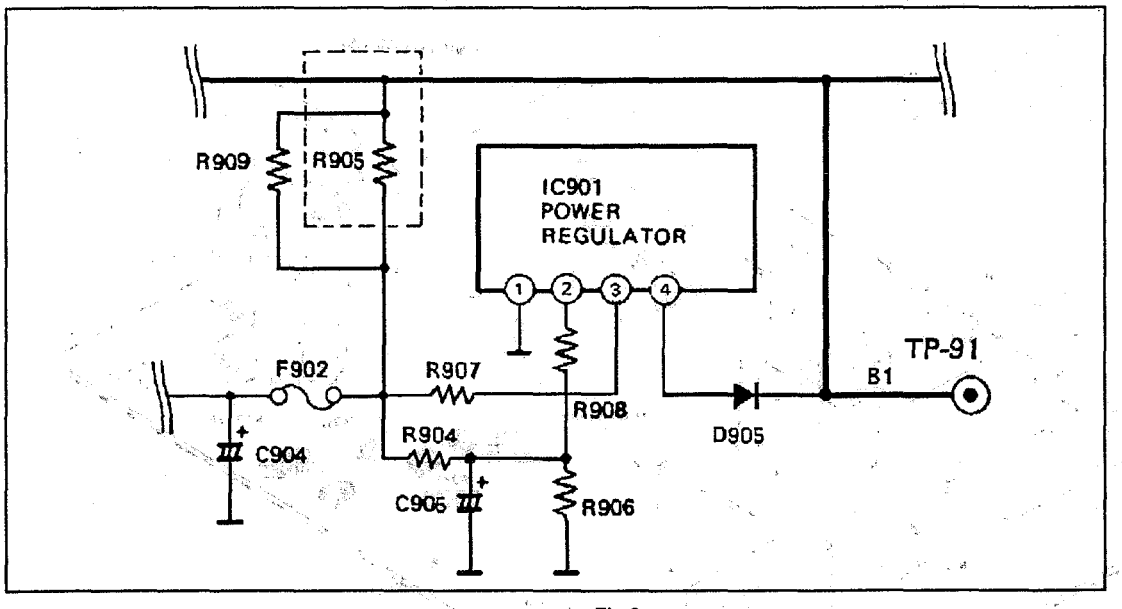
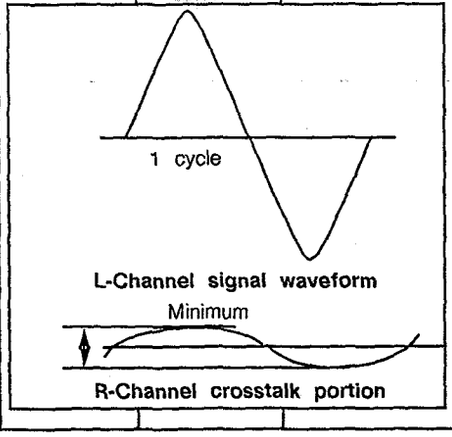
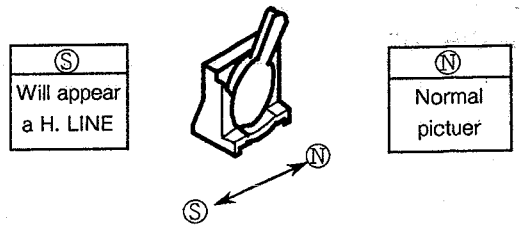


Fig.2

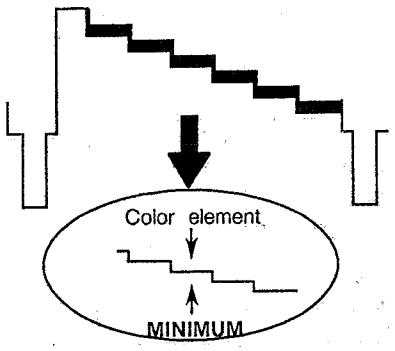
ADJUSTMENT

Item	Measuring instrument	Test point	Adjustment part	Description
POWER CIRCUIT				
B1 POWER SUPPLY	DC VOLTE METER	TP-91 TP-E (⊥)		1. Confirm that the voltage between TP-91 and TP-E (⊥) is DC 129.3 V.
MAIN CIRCUIT				
NOISE (RF. AGC)			NOISE VR	1. Adjust the NOISE VR so that the noise appears in the image. 2. Next turn the NOISE VR in a direction that the noise disappears from the image and stop at the point where the noise has disappeared from the image. 3. Turn to another channel and confirm that there are no abnormal ities.
SUB BRIGHT			SUB BRIGHT VR	1. Press the remote control reset button twice to set the brightness to the standard level. 2. Adjustment of SUB BRIGHT VR to optimum brightness. * Avoid excessive brightness
SUB PICTURE			SUB PICTURE VR	1. Press the remote control reset button twice to set the picture to the standard level. 2. Adjust the SUB PICTURE VR to the optimum picture.
VERTICAL HEIGHT	PATTERN GENERATOR		VERTICAL HEIGHT VR	1. Receive a picture that enables vertical symmetry to be checked. 2. Using the VERTICAL HEIGHT VR, reduce the picture vertically. 3. Upon adjusting with the VERTICAL HEIGHT VR, return the picture to normal vertically.
FOCUS			FOCUS VR	1. Adjust the FOCUS VR to obtain clear pictures. 2. Check that pictures have been adjusted to optimum appearance in both central and peripheral areas of the screen.
SEPARATION	TV MULTI CHANNEL SOUND GENERATOR OSCILLO SCOPE	AUDIO OUTPUT L, R	SEPARATION VR	1. Set the TV multichannel sound signal generator for generating stereo signal and output signal of about 3KHz from the left channel. 2. Connect an oscilloscope to the " L" output and obtain a clear view of 1- cycle portion of 3KHz waveforms. 3. Change connection of the oscilloscope to the "R" output and expand the voltage axis. 4. Adjust the SEPARATION VR and minimize the 3KHz crosstalk portion. NOTE : Do not touch the VRs inside the MULTICHANNEL SOUND CIRCUIT.



Item	Measuring instrument	Test point	Adjustment part	Description
HORIZONTAL LINE			SERVICE SWITCH	1. Turning the SERVICE SWITCH from the N side to the S side will bring the hoizontal line display to the screen. 

S.VIDEO CIRCUIT

COMB FILTER	PATTERN GENERATOR OSCILLO SCOPE	TP-46 or pin⑪ IC361	DL P TRANSF. COMB FILTER VR	1. Receive the color bar signal image. 2. Connect the oscilloscope to TP-46 or pin⑪ of IC361 . Magnify the chrome signal portions of the color bar waveform so that the 3.58 MHz elements become easy to observe. 3. Adjust DLP Transf. (T251), and minimize the 3.58MHz elements. 4. Regulate the COMB FILTER adjustment VR (R272) to further minimize the 3.58MHz elements. 5. Repeat steps 3 and 4 to fully minimize the 3.58MHz elements. 

PURITY, CONVERGENCE AND WHITE BALANCE

* The locations of SERVICE SWITCH, SCREEN VR, CUT-OFF VR and DRIVE VR are described in the ALIGNMENT LOCATION of SERVICE ADJUSTMENT or the SCHEMATIC DIAGRAM.

PICTURE TUBE

The picture tube is a precision in-line gun type. For this picture tube, dynamic convergence is carried out by a precision deflection yoke which eliminated the use of convergence yoke and convergence circuit. The adjustment of picture tube is therefore made easier as only the adjustment of static convergence by using a magnetic is enough. The deflection yoke and purity/convergency magnets assembly has been set at the factory and requires no field adjustments. However, should the assembly be accidentally jarred or tampered with, some or all adjustments may by necessary.

COLOR PURITY & VERTICAL CENTER

Loosen yoke retaining screw (Fig. B-1) . With a sharp knife cut between the picture tube and the wedge. Remove wedges completely and clean off dried adhesive from the picture tube. PAINT is used to lock the tabs of the purity/convergence magnet assembly in place (Fig. B-1) . The paint must be removed with the end of a screwdriver before any adjustments are attempted.

(As to models equipped with a magnet locking ring, beforehand loosen it.)

1. Select no signal UHF channel. (or Display a monochrome pattern)
2. Let the purity tabs come in line horizontally as is shown in Fig. B-2. A long tab should be in the same direction as the other short tab.
3. Move the yoke slowly backward.
4. Turn the GREEN CUT-OFF VR to maximum and the RED and BLUE CUT-OFF VRs to minimum. Then adjust the SCREEN VR so that the green band can be seen best. (Fig. B-3)
5. Rotate the two tabs in the opposite directions and with them kept at an angle, together in either direction so that the green band is centered on the picture tube.
6. Check the vertical center position by displaying a horizontal line. (Select the CUT-OFF SERVICE SWITCH from N to S and a HORIZONTAL LINE will appear.) Unless correct, bring it to the nearest center by rotating the two tabs, kept at an angle, together in either direction. (Fig. B-4)
7. Repeat steps 5 and 6 alternately until the green band and the vertical center come to the center.
8. Move the yoke slowly towards the bell of the tube so that the whole surface of the picture tube is filled with a green pure raster.
9. Turning RED or BLUE CUT-OFF VR to maximum and GREEN CUT-OFF VR to minimum, make sure of a red or blue pure raster.
10. Secure yoke retaining screw (do not install wedges at this time) .

(As to models equipped with a magnet locking ring, secure it and keep six magnets from moving even if it is touched slightly.)

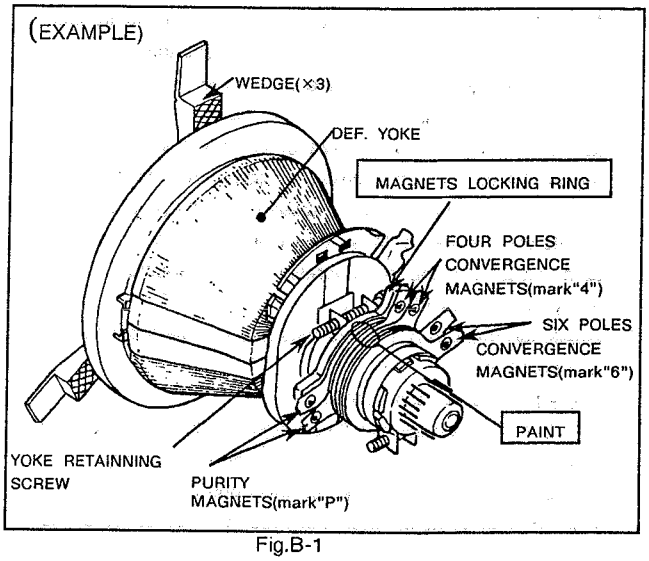


Fig.B-1

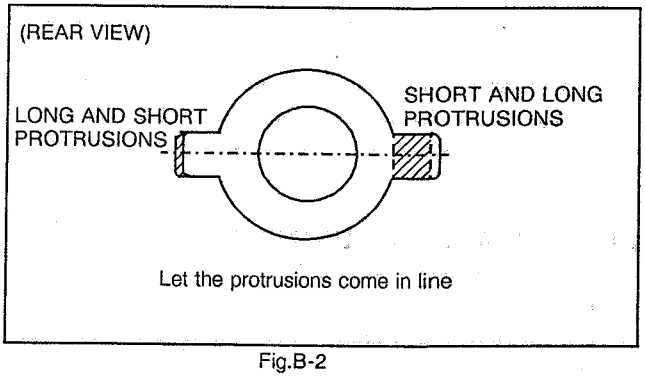


Fig.B-2

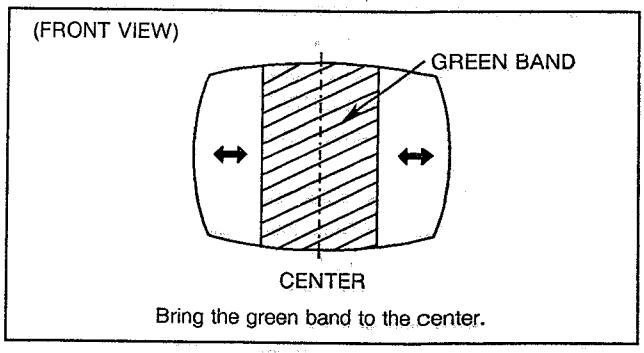


Fig.B-3

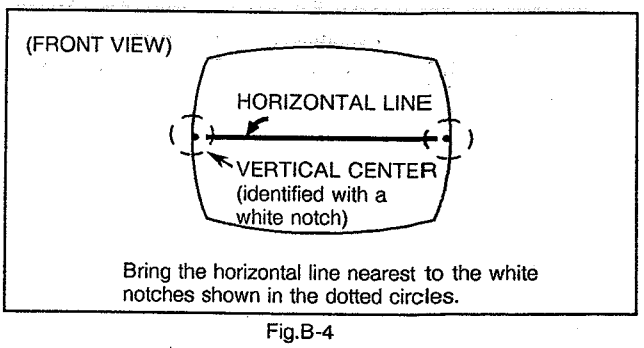

(FRONT VIEW)
HORIZONTAL LINE
VERTICAL CENTER
(identified with a white notch)
Bring the horizontal line nearest to the white notches shown in the dotted circles.

Fig.B-4

STATIC CONVERGENCE & DYNAMIC CONVERGENCE

1. Connect a crosshatch generator to the input terminals and adjust BRIGHTNESS and CONTRAST control for a distinct pattern.
2. Adjust the convergence around the edges of the picture tube by tilting the yoke, up-down and left-right, and temporarily install one wedge at the top of the yoke. (Fig. B-7, 8, 9)
3. Rotate the front pair of tabs (four pole convergence magnet) as a unit to minimize the separation of the red and blue lines around the center of the screen. To adjust the convergence of red and blue, vary the angle between the tabs (Fig. B-5)
4. Rotate the rear pair of tabs (six pole convergence magnets) as a unit to minimize the separation of the magenta (R/B) and green lines. (Fig. B-6)
5. Adjust the spacing of the rear tabs to converge the magenta and green lines.
6. Apply paint to fix six magnets.
   (As to models equipped with a magnet locking ring, tighten it.)
7. Remove the wedge installed temporarily on the yoke.
8. Tilting the angle of the yoke up, down and sideways, and adjust the yoke so as to obtain the circumference convergence. (Fig. B-8, 9)
9. Insert wedges to the position as shown in Fig. B-10 to obtain the best circumference convergence.
10. Wedge has a backing of double sided adhesive tape. Therefor, tear off one side of adhesive tape, and fix the wedges.
11. White balance adjustment (Black & White tracking) can now be performed.

WHITE BALANCE ADJUSTMENT

(Black and White Tracking)

1. Display a monochrome pattern.
2. Set the RED and GREEN DRIVE VRs for their mechanical center.
3. Turn the RED, GREEN and BLUE CUT-OFF VRs and the SCREEN VR fully counterclockwise.
4. Display a horizontal line. (Select the CUT-OFF SERVICE SWITCH from N to S and a HORIZONTAL LINE will appear.)
5. Turn SCREEN VR slowly clockwise until a very faint horizontal line appears.
6. Turn the CUT-OFF VR of the color which has appeared first, clockwise by about 10°and then adjust the SCREEN VR again so that the color may shine faintly.
7. Turn the other color CUT-OFF VRs slowly clockwise until a reasonable white line appears.
8. Return the monochrome pattern. (When returning a monochrome pattern select the CUT-OFF SERVICE SWITCH from S to N and a monochrome pattern will appear.)
9. Adjust the RED and GREEN DRIVE VRs for best white highlights.

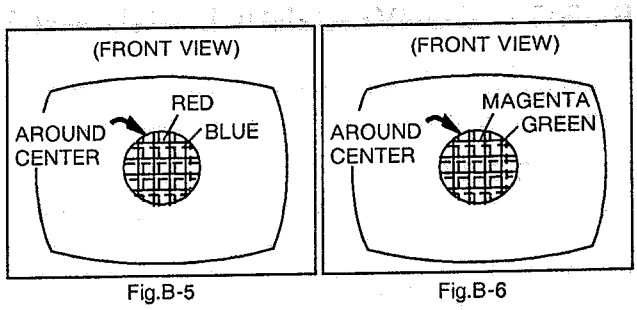


Fig.B-5 Fig.B-6

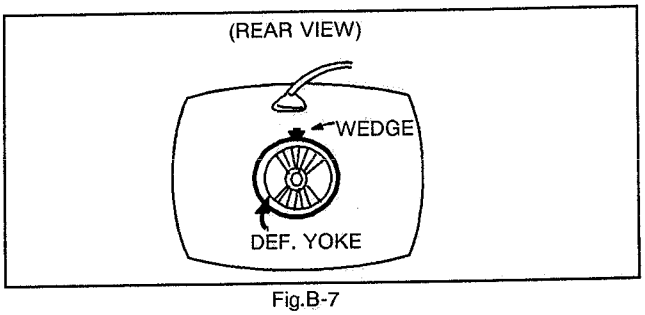


Fig.B-7

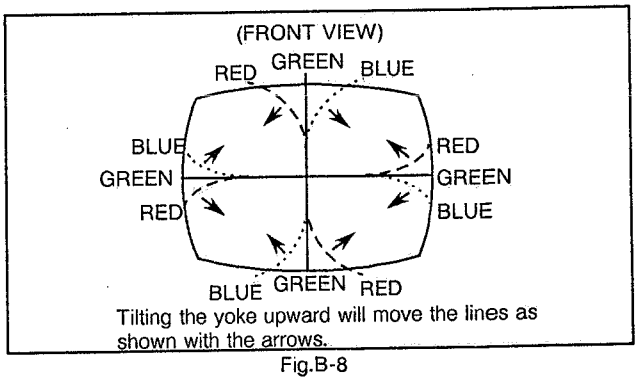


Fig.B-8

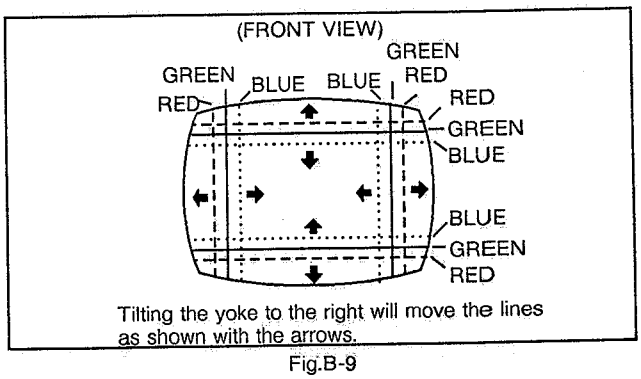


Fig.B-9

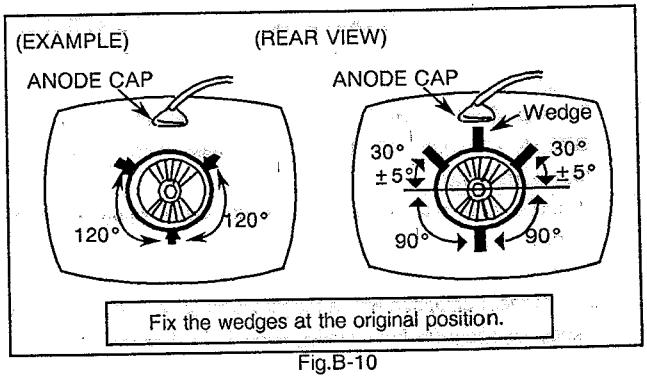


Fig.B-10

PARTS LIST

CAUTION

- The parts marked ⚠ are very important for the safety. When replacing these parts, be sure to use specified ones to secure the safety and performance.
- The module circuit board is supplied together with the assembly, but the parts which do not have the drawing in this Parts List, P. C. Board Ass'y and the Parts No. columns of which are filled with lines —— . will not be supplied.
- As a rule, the resistors and capacitors which are indicated as shown in (NOTE 2) "HOW TO EXPRESS PARTS NUMBERS OF STANDARD PARTS" are not shown in the list of the parts on the board.
  When ordering the service parts, confirm the resistance/rated power, capacitance/rated voltage, and type of the parts, then order by the part No. indicated according to (NOTE 2).

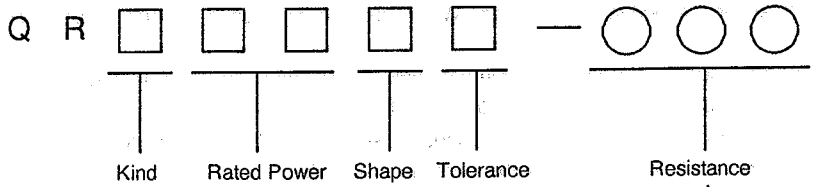
(NOTE 1) ABBREVIATIONS OF RESISTORS, CAPACITORS AND TOLERANCES

RESISTORS		CAPACITORS	
C R	Carbon Resistor	C CAP.	Ceramic Capacitor
F R	Fusible Resistor	E CAP.	Electrolytic Capacitor
P R	Plate Resistor	M CAP.	Mylar Capacitor
V R	Variable Resistor	HV CAP.	High Voltage Capacitor
HV R	High Voltage Resistor	MF CAP.	Metalized Film Capacitor
MF R	Metal Film Resistor	MM CAP.	Metalized Mylar Capacitor
MG R	Metal Glazed Resistor	MP CAP.	Metalized Polystyrol Capacitor
MP R	Metal Plate Resistor	PP CAP.	Polypropylene Capacitor
OM R	Metal Oxide Film Resistor	PS CAP.	Polystyrol Capacitor
CMF R	Coating Metal Film Resistor	TF CAP.	Thin Film Capacitor
UNF R	Non-Flammable Resistor	MPP CAP.	Metalized Polypropylene Capacitor
CH V R	Chip Variable Resistor	TAN CAP.	Tantalum Capacitor
CH MG R	Chip Metal Glazed Resistor	CH C CAP.	Chip Ceramic Capacitor
COMP R	Composition Resistor	BP E CAP.	Bi-Polar Electrolytic Capacitor
LPTC R	Linear Positive Temperature Coefficient Resistor	CH AL E CAP.	Chip Aluminum Electrolytic Capacitor
		CH AL BP CAP.	Chip Aluminum Bi-Polar Capacitor
		CH TAN E CAP.	Chip Tantalum Electrolytic Capacitor
		CH AL BP E CAP.	Chip Tantalum Bi-Polar Electrolytic Capacitor

TOLERANCES									
F	G	J	K	M	N	R	H	Z	P
±1%	±2%	±5%	±10%	±20%	±30%	+30% - 10%	+50% - 10%	+80% - 20%	+100% - 0%

(NOTE 2) HOW TO EXPRESS PARTS NUMBERS OF STANDARD PARTS

■ RESISTOR



Symbol	Part Name
C	COMP.R
D	C R
S	CH MG R

Symbol	Rated Power
0 1	1 w
1 2	1/2 w
1 4	1/4 w
1 6	1/6 w
1 8	1/8 w

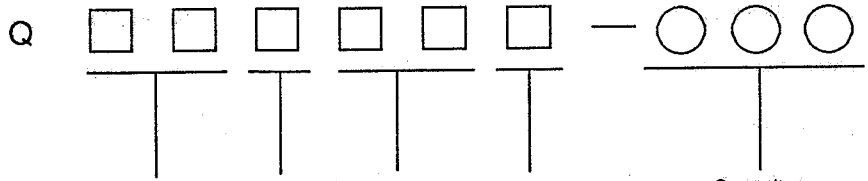
Symbol	Shape
1	Straight lead
8	Chip

Indicate with first two-figure expressed by Ω and following 0.
please note that,in case of resistance less than 10 Ω, a letter "R"will be effective as point.

EX.

2.2 Ω = 2R2
470 Ω = 47×10^{1} → 471
150kΩ = 15×10^{4} → 154

■ CAPACITOR



Symbol	Part Name
CS	C CAP.
CS	CH C CAP.
ET	E CAP.
FM	M CAP.

5Figure / 6Figure	0	1	2
A		10V	100V
C		16V	160V
D			200V
E		25V	250V
H		50V	500V
J	6.3V	63V	
V		35V	

Indicate with first two-figure expressed by pF and following 0.
Please note that,in case of capacitance less than 10 pF a letter "R" will be effective as point.

EX

5pF = 5R0
1000pF = 10×10^{2} → 102
47μF = 47×10^{6} → 476

Symbol	Shape
1	Straight lead
1	Leads in the same direction
8	Chip
A	Leads in the same direction (compact part)

MAIN PARTS LIST

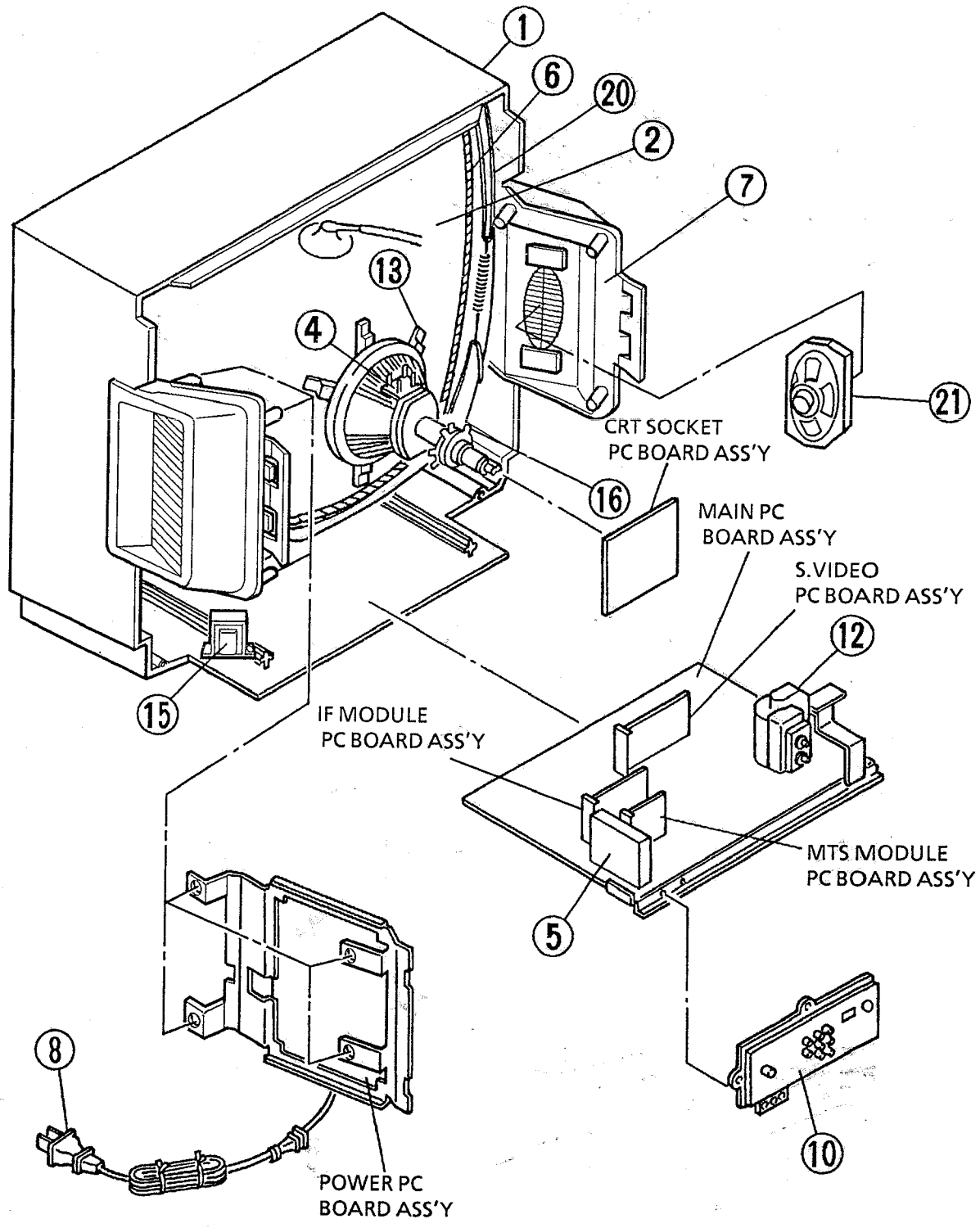
SYMBOL NO.	⚠	PART NO.	PART NAME	REMARKS
CRT & TUNER				
		CE41595-00AJ1	WEDGE ASSY	X4 *
		A75034-B	P&C MAGNET	
	⚠	CE20155-A0AKJ1	DEF YOKE ASSY	DY01 *
	⚠	CE41329-00CJ2	DEG COIL	L01 *
	⚠	AN3181EL-B01	TUNER	TU1701 *
	⚠	MVA66AAM03X	PICTURE TUBE	V01 *
VARIABLE R				
R1112		QVPE610-203H	V R (NOISE)	20kΩ B
R1246		QVPE610-202H	V R (BRIGHT)	2kΩ B
R1249		QVPE610-103H	V R (PICTURE)	10kΩ B
R1428		QVPE610-102H	V R (V. HEIGHT)	1kΩ B
R1606		QVPE610-103H	V R (SEPA)	10kΩ B
R3104		QVPA803-502M	V R (B. CUT OFF)	5kΩ B
R3105		QVPA803-502M	V R (G. CUT OFF)	5kΩ B
R3106		QVPA803-502M	V R (R. CUT OFF)	5kΩ B
R3111		QVPA803-201M	V R (G. DRIVE)	200 Ω B
R3112		QVPA803-201M	V R (R. DRIVE)	200 Ω B
R7272		QVPA802-501M	V R (COMB FILTER)	500 Ω B
TRANSFORMER				
	⚠	CE30124-002J2	POWER TRANSF.	T01 *
T1521	⚠	CE40361-00E	DRIVE TRANSF.	
	⚠	CE41236-00B-KD	H. V. TRANSF.	T1522
DIODE				
D1201		RD7.5ES(B3)-T2	ZENER DIODE	
D1203		MA4150(L)-T2	ZENER DIODE	
D1501		MA4068(M)-T2	ZENER DIODE	
D1502		MA4091(M)-T2	ZENER DIODE	
D1503	⚠	MA4068(N)C1-T2	ZENER DIODE	
D1601		MA4100(M)-T2	ZENER DIODE	
D1715		GL-5HD23	L. E. D.	POWER/ON TIMER
D1717		MA4330(M)-T2	ZENER DIODE	
D1794		MA4062(H)-T2	ZENER DIODE	
D1851		MA4120(M)-T2	ZENER DIODE	
D1852		MA4120(M)-T2	ZENER DIODE	
D1924		MA4130(H)-T2	ZENER DIODE	
TRANSISTOR				
Q1522	⚠	2SD1555-LB	SI. TRANSISTOR	H. OUT or 2SD1427-LB
IC				
IC1201	⚠	TA8601BNV	I. C.	
IC1361		AN5352N	I. C. (M)	
IC1421	⚠	UPC1498H	I. C.	
IC1651		TA7630P	I. C. (M)	
IC1681		AN7168	I. C. (M)	
IC1701		MN152121JMT3	I. C. (M)	
IC1702		MN1280-K	I. C. (M)	
IC1801		TA78L005AP	I. C.	
IC1831		MN12C201D	I. C. (M)	
IC1841		GP1U521Y	IR DETECT UNIT	
IC1851		M51320P	I. C. (M)	
IC1852		M5218L	I. C.	
IC7202		BU4066B	I. C.	or MN4066B
IC9901	⚠	STR30130-A	I. C. (H)	
OTHERS				
		SGX-A001A-MU3	MTS MODULE PC BC	
		CM11179-001-MA	FRONT CABINET AS	*
		CM21448-001-MA	FRONT GRILLE	*

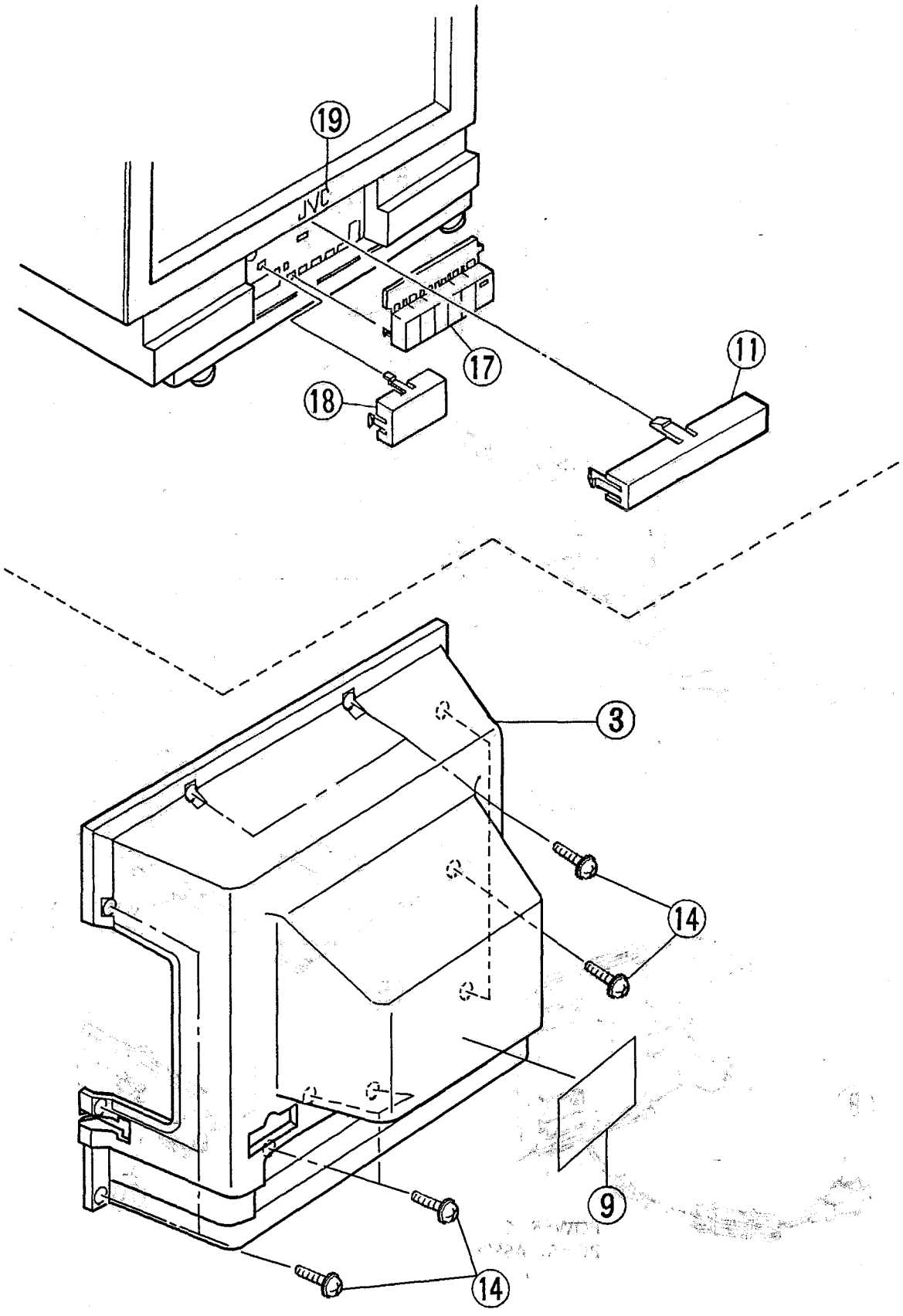
SYMBOL NO.	⚠	PART NO.	PART NAME	REMARKS	
OTHERS					
		CM32864-A0A-KD	KNOB ASSY		
	⚠	QMP14C0-200J3	POWER CORD		*
		CM32825-00J-KD	ANT TERMINAL		
		CM11180-001-MA	REAR COVER		*
CF1501		CSB503F17	C. RESONATOR		
CF1701		CSA4.00MS3	CELAMIC FILTER		
DL1201		CE40178-001	DELAY LINE		
DL7202		CE40907-A01	1H DELAY LINE		
F1961	⚠	QMF53U1-2R0S	FUSE	2.0A	
F9901	⚠	QMF66U1-5R0S	FUSE	5.0A	
F9902	⚠	QMF53U1-1R25S	FUSE	1.25A	
LF9901	⚠	CE41506-00B	LINE FILTER		
RY9901	⚠	CESK002-001	RELAY		
		CEBSN12D-01KJ3	SPEAKER	SP01, SP02	*
S1201		QSL4A13-C02	LEVER SWITCH	SERVICE SW	
S1401		QSL4A13-C02	LEVER SWITCH	V. CENTER SW	
S1701		QSP4H11-C03	PUSH SWITCH	FUNCTION	
S1702		QSP4H11-C03	PUSH SWITCH	CH/LEVEL DOWN	
S1703		QSP4H11-C03	PUSH SWITCH	CH/LEVEL UP	
S1704		QSP4H11-C03	PUSH SWITCH	POWER	
S1705		QSP4H11-C03	PUSH SWITCH	VOL △	
S1706		QSP4H11-C03	PUSH SWITCH	VOL ▽	
TH9901	⚠	CE40595-001	TH POSISTOR	or CE40595-001T	
X1301		A76351-D	CRYSTAL		

EXPLODED VIEW PARTS LIST

	SYMBOL NO.	PART NO.	PART NAME	REMARKS	
	1	CM11179-001-MA	FRONT CABINET AS		*
⚠	2	MVA66AAM03X	PICTURE TUBE	V01	*
	3	CM11180-001-MA	REAR COVER		*
⚠	4	CE20155-A0AKJ1	DEF YOKE ASSY	DY01	*
⚠	5	AN3181EL-B01	TUNER	TU1701	*
⚠	6	CE41329-00CJ2	DEG COIL	L01	*
	7	CM11188-001-MA	SP GRILLE	X2	*
⚠	8	QMP14C0-200J3	POWER CORD		*
	9	CM44889-001-A	RATING LABEL		*
	10	CM32825-00J-KD	ANT TERMINAL		
	11	CM21448-001-MA	FRONT GRILLE		*
⚠	12	CE41236-00B-KD	H. V. TRANSF.	T1522	
	13	CE41595-00AJ1	WEDGE ASSY	X4	*
	14	GBSB4016N	W TAP SCREW	X11	*
⚠	15	CE30124-002J2	POWER TRANSF.	T01	*
	16	A75034-B	P&C MAGNET		
	17	CM32864-A0A-KD	KNOB ASSY		
	18	CM32363-011-V0	REMOCON WINDOW		
	19	CM43094-002	JVC MARK		
	20	CH30336-00A	BRAIDED ASSY		
	21	CEBSN12D-01KJ3	SPEAKER	SP01, SP02	*

EXPLODED VIEW




19
JVC
17
11
18
3
14
9
14

PRINTED CIRCUIT BOARD PARTS LIST

MAIN PC BOARD Ass'y (SX-1227A(H1))

	SYMBOL NO.	PART NO.	PART NAME	REMARKS		
	VARIABLE R					
	R1112	QVPE610-203H	V R (NOISE)	20kΩ	B	
	R1246	QVPE610-202H	V R (BRIGHT)	2kΩ	B	
	R1249	QVPE610-103H	V R (PICTURE)	10kΩ	B	
	R1428	QVPE610-102H	V R (V. HEIGHT)	1kΩ	B	
	R1606	QVPE610-103H	V R (SEPA)	10kΩ	B	
	RESISTOR					
⚠	RB1507	CJ39622-00J	R BLOCK			
	R1201	QRG019J-390S	OM R	39 Ω	1W	J
⚠	R1422	QRC121K-561Z	COMP. R	560 Ω	1/2W	K
	R1426	QRX029J-1R8A	MF R	1.8 Ω	2W	J
⚠	R1433	QRD121J-122SY	C R	1.2kΩ	1/2W	J
⚠	R1508	QRD129J-4R7S	C R	4.7 Ω	1/2W	J
	R1525	QRG029J-560A	OM R	56 Ω	2W	J
⚠	R1526	QRG029J-680A	OM R	68 Ω	2W	J
⚠	R1528	QRG019J-391S	OM R	390 Ω	1W	J
⚠	R1531	QRX029J-2R7A	MF R	2.7 Ω	2W	J
⚠	R1533	QRX039J-2R7A	MF R	2.7 Ω	3W	J
⚠	R1534	QRX039J-2R2A	MF R	2.2 Ω	3W	J
⚠	R1536	QRD149J-1R0S	C R	1.0 Ω	1/4W	J
⚠	R1538	QRX039J-3R3A	MF R	3.3 Ω	3W	J
⚠	R1541	QRD161J-393Y	C R	39kΩ	1/6W	J
⚠	R1542	QRD161J-393Y	C R	39kΩ	1/6W	J
⚠	R1604	QRD161J-331Y	C R	330 Ω	1/6W	J
⚠	R1793	QRD141J-271SY	C R	270 Ω	1/4W	J
⚠	R1796	QRD121J-683SY	C R	68kΩ	1/2W	J
⚠	R1921	QRG029J-102A	OM R	1kΩ	2W	J
	R1925	QRG019J-101S	OM R	100 Ω	1W	J
⚠	R1929	QRD121J-680SY	C R	68 Ω	1/2W	J
⚠	R1999	QRC121K-275EZ	COMP. R	2.7MΩ	1/2W	K
	CAPACITOR					
	C1206	QEN61CM-106Z	BP E CAP.	10μF	16V	M
	C1229	QEN61HM-225Z	BP E CAP.	2.2μF	50V	M
	C1303	QEN61HM-475Z	BP E CAP.	4.7μF	50V	M
	C1307	QFV71HJ-563MZ	TF CAP.	0.056μF	50V	J
	C1401	QEM61HK-225MZ	E CAP.	2.2μF	50V	K
⚠	C1422	QCS31HJ-331AZ	CH C CAP.	330pF	50V	J
	C1426	QFV71HJ-274MZ	TF CAP.	0.27μF	50V	J
⚠	C1428	QCS31HJ-470AZ	CH C CAP.	47pF	50V	J
⚠	C1430	QFK62AJ-104M	MM CAP.	0.1μF	100V	J
⚠	C1431	QFM72AK-103MZ	M CAP.	0.01μF	100V	K
⚠	C1508	QETC1VM-107Z	E CAP.	100μF	35V	M
⚠	C1524	QFZ0081-7201S	MPP CAP.	7200pF	1600V	±3%
⚠	C1525	QFZ0081-6201S	MPP CAP.	6200pF	1600V	±3%
⚠	C1526	QFZ0089-564S	MPP CAP.	0.56μF	1600V	±3%
⚠	C1530	QETB2CM-107	E CAP.	100μF	160V	M
⚠	C1533	QETC1EM-477Z	E CAP.	470μF	25V	M
⚠	C1536	QET52ER-106	E CAP.	10μF	250V	R
⚠	C1540	QFV71HJ-224MZ	TF CAP.	0.22μF	50V	J
⚠	C1542	QFM71HK-103MZ	M CAP.	0.01μF	50V	K
⚠	C1545	QETB1VM-108	E CAP.	1000μF	35V	M
⚠	C1546	QCY32HK-152AZ	CH C CAP.	1500pF	500V	K
⚠	C1547	QCY32HK-152AZ	CH C CAP.	1500pF	500V	K
	C1651	QEN61HM-474Z	BP E CAP.	0.47μF	50V	M
	C1652	QEN61HM-474Z	BP E CAP.	0.47μF	50V	M
	C1654	QFV71HJ-124MZ	TF CAP.	0.12μF	50V	J
	C1659	QFV71HJ-124MZ	TF CAP.	0.12μF	50V	J
	C1684	QFV71HJ-683MZ	TF CAP.	0.068μF	50V	J
	C1687	QFV71HJ-683MZ	TF CAP.	0.068μF	50V	J

	SYMBOL NO.	PART NO.	PART NAME	REMARKS
	CAPACITOR			
	C1690	QFV71HJ-104MZ	TF CAP.	0.1μF 50V J
	C1691	QFV71HJ-104MZ	TF CAP.	0.1μF 50V J
	C1709	QEB61HM-104MZ	E CAP.	0.1μF 50V M
	C1806	QEM51CM-477M	E CAP.	470μF 16V M
	C1808	QEM61EK-106MZ	E CAP.	10μF 25V K
	C1810	QEM61EK-106MZ	E CAP.	10μF 25V K
	C1856	QEN61CM-106Z	BP E CAP.	10μF 16V M
	C1857	QEN61CM-106Z	BP E CAP.	10μF 16V M
⚠	C1960	QETB1VM-108	E CAP.	1000μF 35V M
⚠	C1961	QCF31HP-103AZ	CH C CAP.	0.01μF 50V P
⚠	C1962	QCF31HP-103AZ	CH C CAP.	0.01μF 50V P
⚠	C1963	QCF31HP-103AZ	CH C CAP.	0.01μF 50V P
⚠	C1998	QCZ9029-103M	C CAP.	0.01μFAC125V K
⚠	C1999	QCZ9029-103M	C CAP.	0.01μFAC125V K
	TRANSFORMER			
	T1301	CELT007-001	3.58 B.P. TRANSF.	
⚠	T1521	CE40361-00E	DRIVE TRANSF.	
	COIL			
	L1201	A76186-47Z	PEAKING COIL	47μH
	L1204	A76186-5.6Z	PEAKING COIL	5.6μH
	L1302	A76186-2.2Z	PEAKING COIL	2.2μH
	L1303	A76186-12Z	PEAKING COIL	12μH
	L1521	A76186-56Z	PEAKING COIL	56μH
⚠	L1523	CE41124-00A	LINIARITY COIL	
	L1702	CE40041-220Z	PEAKING COIL	
	L1831	A76186-1.0Z	PEAKING COIL	
	DIODE			
	D1201	RD7.5ES(B3)-T2	ZENER DIODE	
	D1202	MA165-T2	SI. DIODE	
	D1203	MA4150(L)-T2	ZENER DIODE	
	D1204	MA165-T2	SI. DIODE	
	D1205	MA165-T2	SI. DIODE	
	D1207	MA165-T2	SI. DIODE	
	D1208	MA165-T2	SI. DIODE	
	D1209	MA165-T2	SI. DIODE	
	D1210	MA165-T2	SI. DIODE	
	D1250	MA165-T2	SI. DIODE	
	D1301	MA165-T2	SI. DIODE	
	D1302	MA165-T2	SI. DIODE	
	D1303	MA165-T2	SI. DIODE	
	D1304	MA165-T2	SI. DIODE	
	D1305	MA165-T2	SI. DIODE	
	D1306	MA165-T2	SI. DIODE	
⚠	D1421	1SR35-100-T3	SI. DIODE	
	D1501	MA4068(M)-T2	ZENER DIODE	
	D1502	MA4091(M)-T2	ZENER DIODE	
⚠	D1503	MA4068(N)C1-T2	ZENER DIODE	
⚠	D1504	1SS81-T2	SI. DIODE	
⚠	D1505	1N4003-T3	SI. DIODE	
⚠	D1521	RU4DS-LFK2	SI. DIODE	
	D1522	MA165-T2	SI. DIODE	
⚠	D1531	1SR35-100-T3	SI. DIODE	
⚠	D1533	RU3AM-LFB1	SI. DIODE	
⚠	D1534	RGP10J-T3	SI. DIODE	
⚠	D1536	RH1S-T3	SI. DIODE	
	D1540	1SS81-T2	SI. DIODE	
	D1601	MA4100(M)-T2	ZENER DIODE	
	D1631	MA165	SI. DIODE	

	SYMBOL NO.	PART NO.	PART NAME	REMARKS
	DIODE			
	D1632	MA165	SI. DIODE	
	D1650	MA165-T2	SI. DIODE	
	D1651	MA165-T2	SI. DIODE	
	D1652	MA165-T2	SI. DIODE	
	D1653	MA165-T2	SI. DIODE	
	D1654	MA165-T2	SI. DIODE	
	D1702	MA165-T2	SI. DIODE	
	D1703	MA165-T2	SI. DIODE	
	D1704	MA165-T2	SI. DIODE	
	D1708	MA165-T2	SI. DIODE	
	D1709	MA165-T2	SI. DIODE	
	D1710	MA165-T2	SI. DIODE	
	D1711	MA165-T2	SI. DIODE	
	D1715	GL-5HD23	L. E. D.	POWER/ON TIMER
	D1717	MA4330 (M) -T2	ZENER DIODE	
	D1721	MA165-T2	SI. DIODE	
	D1722	MA165-T2	SI. DIODE	
	D1723	MA165-T2	SI. DIODE	
	D1724	MA165-T2	SI. DIODE	
	D1725	MA165-T2	SI. DIODE	
	D1731	MA165-T2	SI. DIODE	
	D1732	MA165-T2	SI. DIODE	
	D1736	MA165-T2	SI. DIODE	
	D1737	MA165-T2	SI. DIODE	
	D1780	MA165-T2	SI. DIODE	
	D1781	MA165-T2	SI. DIODE	
	D1794	MA4062 (H) -T2	ZENER DIODE	
	D1795	MA165-T2	SI. DIODE	
	D1796	MA165-T2	SI. DIODE	
	D1831	MA165-T2	SI. DIODE	
	D1851	MA4120 (M) -T2	ZENER DIODE	
	D1852	MA4120 (M) -T2	ZENER DIODE	
	D1921	MA165-T2	SI. DIODE	
	D1922	MA165-T2	SI. DIODE	
	D1923	MA165-T2	SI. DIODE	
	D1924	MA4130 (H) -T2	ZENER DIODE	
	D1925	1N4003-T3	SI. DIODE	
⚠	D1961	W06A-T3	SI. DIODE	
⚠	D1962	W06A-T3	SI. DIODE	
⚠	D1963	W06A-T3	SI. DIODE	
⚠	D1964	W06A-T3	SI. DIODE	
	TRANSISTOR			
	Q1201	2SC2785 (JH) -T	SI. TRANSISTOR	
	Q1202	2SA1175 (JH) -T	SI. TRANSISTOR	
	Q1204	2SC2785 (JH) -T	SI. TRANSISTOR	
	Q1209	2SA1175 (JH) -T	SI. TRANSISTOR	
	Q1302	2SC2785 (JH) -T	SI. TRANSISTOR	
	Q1521	2SC2655 (Y) -T	SI. TRANSISTOR	
⚠	Q1522	2SD1555-LB	SI. TRANSISTOR	H. OUT or 2SD1427-LB
	Q1523	2SA1175 (JH) -T	SI. TRANSISTOR	
⚠	Q1601	2SC1815 (G) -T	SI. TRANSISTOR	
	Q1621	2SC1815 (YG)	SI. TRANSISTOR	
	Q1622	2SC1815 (YG)	SI. TRANSISTOR	
	Q1635	2SC2785 (JH) -T	SI. TRANSISTOR	
	Q1636	2SA1015 (YG) -T	SI. TRANSISTOR	
	Q1637	2SC1815 (YG)	SI. TRANSISTOR	
	Q1651	2SC2785 (JH) -T	SI. TRANSISTOR	

	SYMBOL NO.	PART NO.	PART NAME	REMARKS
	TRANSISTOR			
	Q1652	2SC2785 (JH) -T	SI. TRANSISTOR	
	Q1653	2SC2785 (JH) -T	SI. TRANSISTOR	
	Q1701	2SC2785 (JH) -T	SI. TRANSISTOR	
	Q1702	2SC2785 (JH) -T	SI. TRANSISTOR	
	Q1705	2SC2785 (JH) -T	SI. TRANSISTOR	
	Q1707	2SB774 (RS) -T	SI. TRANSISTOR	
	Q1708	2SB774 (RS) -T	SI. TRANSISTOR	
	Q1712	2SC2785 (JH) -T	SI. TRANSISTOR	
	Q1780	2SC2785 (JH) -T	SI. TRANSISTOR	
	Q1781	2SC2785 (JH) -T	SI. TRANSISTOR	
	Q1782	2SC2785 (JH) -T	SI. TRANSISTOR	
	Q1791	2SC3619	SI. TRANSISTOR	
	Q1851	2SC2785 (JH) -T	SI. TRANSISTOR	
	Q1852	2SC2785 (JH) -T	SI. TRANSISTOR	
	Q1853	2SC2878 (B) -T	SI. TRANSISTER	
	Q1854	2SC2878 (B) -T	SI. TRANSISTER	
	Q1857	2SA1175 (JH) -T	SI. TRANSISTOR	
⚠	Q1921	2SD1265 (QP)	SI. TRANSISTOR	
⚠	Q1922	2SC2785 (JH) -T	SI. TRANSISTOR	
	Q1923	2SC2785 (JH) -T	SI. TRANSISTOR	
	Q1924	2SA1175 (JH) -T	SI. TRANSISTOR	
	Q1925	2SC1959 (Y) -T	SI. TRANSISTER	
	IC			
⚠	IC1201	TA8601BNV	I. C.	
	IC1361	AN5352N	I. C. (M)	
⚠	IC1421	UPC1498H	I. C.	
	IC1651	TA7630P	I. C. (M)	
	IC1681	AN7168	I. C. (M)	
	IC1701	MN152121JMT3	I. C. (M)	
	IC1702	MN1280-K	I. C. (M)	
	IC1801	TA78L005AP	I. C.	
	IC1831	MN12C201D	I. C. (M)	
	IC1841	GP1U521Y	IR DETECT UNIT	
	IC1851	M51320P	I. C. (M)	
	IC1852	M5218L	I. C.	
	OTHERS			
		SGX-A001A-MU3	MTS MODULE PC BO	
	CF1501	CSB503F17	C. RESONATOR	
	CF1701	CSA4. 00MS3	CELAMIC FILTER	
	DL1201	CE40178-001	DELAY LINE	
⚠	F1961	QMF53U1-2R0S	FUSE	2. 0A
	S1201	QSL4A13-C02	LEVER SWITCH	SERVICE SW
	S1401	QSL4A13-C02	LEVER SWITCH	V. CENTER SW
	S1701	QSP4H11-C03	PUSH, SWITCH	FUNCTION
	S1702	QSP4H11-C03	PUSH SWITCH	CH/LEVEL DOWN
	S1703	QSP4H11-C03	PUSH SWITCH	CH/LEVEL UP
	S1704	QSP4H11-C03	PUSH SWITCH	POWER
	S1705	QSP4H11-C03	PUSH SWITCH	VOL △
	S1706	QSP4H11-C03	PUSH SWITCH	VOL ▽
	X1301	A76351-D	CRYSTAL	

CRT SOCKET PC BOARD Ass'y (SX-3055A(H1))

	SYMBOL NO.	PART NO.	PART NAME	REMARKS
	VARIABLE R			
	R3104	QVPA803-502M	V R (B. CUT OFF)	5kΩ B
	R3105	QVPA803-502M	V R (G. CUT OFF)	5kΩ B
	R3106	QVPA803-502M	V R (R. CUT OFF)	5kΩ B
	R3111	QVPA803-201M	V R (G. DRIVE)	200 Ω B
	R3112	QVPA803-201M	V R (R. DRIVE)	200 Ω B
	RESISTOR			
⚠	R3113	QRG029J-123A	OM R	12kΩ 2W J
⚠	R3114	QRG029J-123A	OM R	12kΩ 2W J
⚠	R3115	QRG029J-123A	OM R	12kΩ 2W J
	CAPACITOR			
⚠	C3107	QCZ0121-102M	C CAP.	1000pF 3kV P
	COIL			
⚠	L3101	QQL043K-181	PEAKING COIL	180μH
⚠	L3102	CE41055-470	CHOKE COIL	
	TRANSISTOR			
	Q3101	2SC3271 (NP) -C1	SI. TRNSISITOR	
	Q3102	2SC3271 (NP) -C1	SI. TRNSISITOR	
	Q3103	2SC3271 (NP) -C1	SI. TRNSISITOR	
	OTHERS			
⚠		A75522-H	CRT SOCKET	

S VIDEO PC BOARD Ass'y (SX-7203A(H1))

SYMBOL NO.	PART NO.	PART NAME	REMARKS
VARIABLE R			
R7272	QVPA802-501M	V R (COMB FILTER)	500 Ω B
TRANSFORMER			
T7251	CE40176-001	DL P TRANSF.	
COIL			
L7202	A76186-27Z	PEAKING COIL	27μH
L7203	CE40041-5R6Z	PEAKING COIL	5.6μH
TRANSISTOR			
Q7205	2SC1815 (YG) -T	SI. TRANSISTOR	
Q7206	2SC1815 (YG) -T	SI. TRANSISTOR	
Q7207	2SC1815 (YG) -T	SI. TRANSISTOR	
Q7208	2SC1815 (YG) -T	SI. TRANSISTOR	
Q7211	2SC1815 (YG) -T	SI. TRANSISTOR	
Q7212	2SA1015 (YG) -LB	SI. TRANSISTOR	
Q7213	2SC1815 (YG) -T	SI. TRANSISTOR	
Q7214	2SC1815 (YG) -T	SI. TRANSISTOR	
Q7301	2SC1815 (YG) -T	SI. TRANSISTOR	
Q7311	2SC1815 (YG) -T	SI. TRANSISTOR	
Q7312	2SA1015 (YG) -T	SI. TRANSISTOR	
Q7861	2SC1815 (YG) -T	SI. TRANSISTOR	
Q7862	2SC1815 (YG) -T	SI. TRANSISTOR	
IC			
IC7202	BU4066B	I. C.	or MN4066B
OTHERS			
DL7202	CE40907-A01	1H DELAY LINE	

POWER PC BOARD Ass'y (SX-9141A(H1))

	SYMBOL NO.	PART NO.	PART NAME	REMARKS
	RESISTOR			
⚠	R9901	QRF074K-1R8	UNF R	1.8Ω 7W K
⚠	R9904	QRD122J-103S	C R	10kΩ 1/2W J
⚠	R9905	QRF154J-331	UNF R	330Ω 15W J
⚠	R9907	QRF054K-4R7	UNF R	4.7Ω 5W K
⚠	R9909	QRF154J-331	UNF R	330Ω 15W J
	CAPACITOR			
⚠	C9901	QCZ9034-472A	C CAP.	4700pFAC125V P
⚠	C9902	QCZ9034-472A	C CAP.	4700pFAC125V P
⚠	C9903	QCZ9034-472A	C CAP.	4700pFAC125V P
⚠	C9904	QEU72DM-567M	E CAP.	560μF 200V M
⚠	C9907	QFZ9025-104M	MF CAP.	0.1μFAC125V M
⚠	C9908	QFZ9025-104M	MF CAP.	0.1μFAC125V M
	DIODE			
⚠	D9901	1S1887A-T3	SI. DIODE	
⚠	D9902	1S1887A-T3	SI. DIODE	
⚠	D9903	1S1887A-T3	SI. DIODE	
⚠	D9904	1S1887A-T3	SI. DIODE	
⚠	D9905	1S1887A-T3	SI. DIODE	
	IC			
⚠	IC9901	STR30130-A	I. C. (H)	
	OTHERS			
⚠	F9901	QMF66U1-5R0S	FUSE	5.0A
⚠	F9902	QMF53U1-1R25S	FUSE	1.25A
⚠	LF9901	CE41506-00B	LINE FILTER	
⚠	RY9901	CESK002-001	RELAY	
⚠	TH9901	CE40595-001	TH POSISTOR	or CE40595-001T

MODULE PC BOARD PARTS LIST

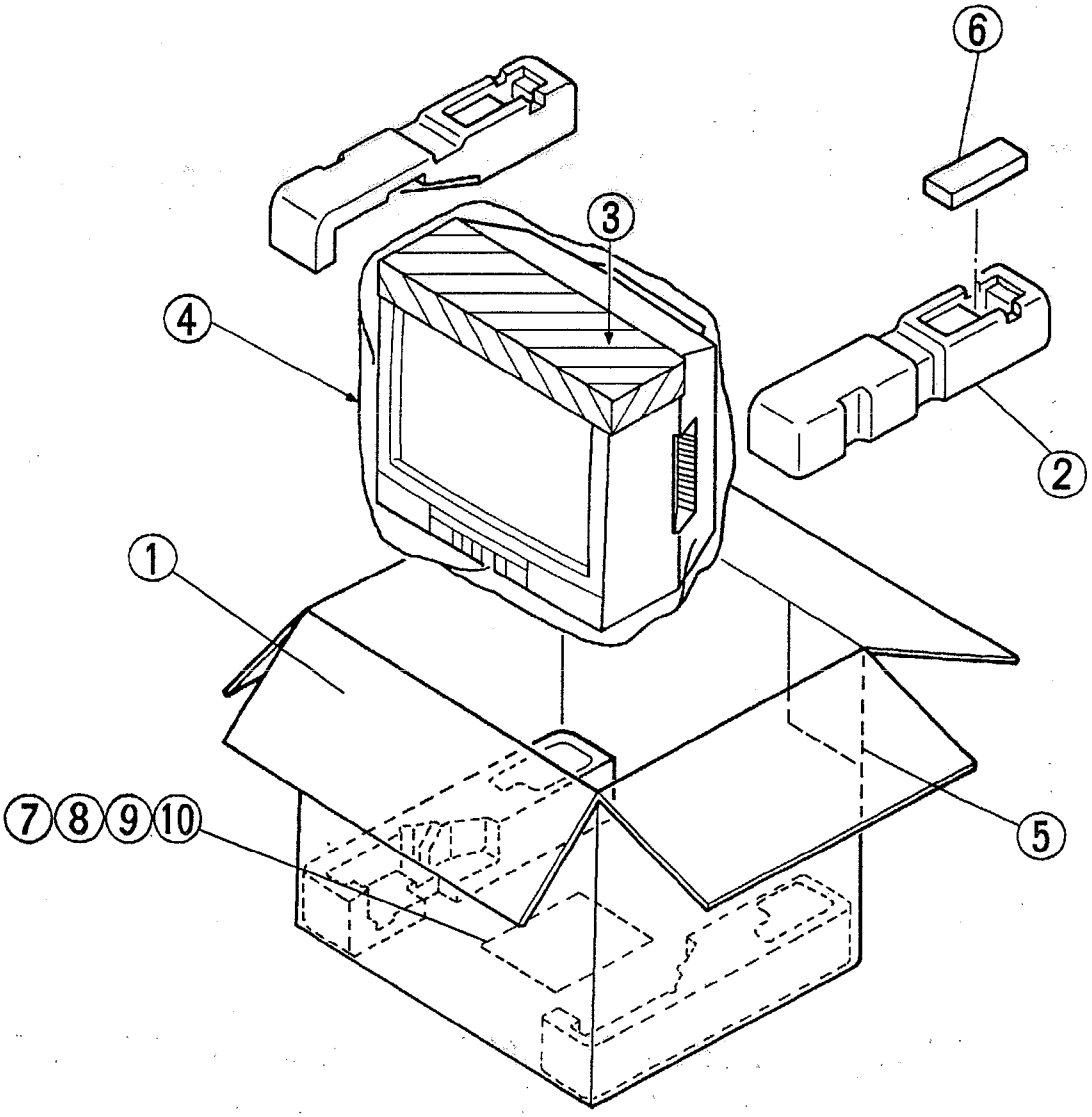
The following module pc boards are supplied as assemblies.

The component parts on the module PC boards are available only when the parts are listed in the "MODULE PRINTED CIRCUIT BOARD PARTS LIST".

IF MODULE PC BOARD Ass'y (SFX-F004A)

MTS MODULE PC BOARD Ass'y (SGX-A001A-MU3) with in MAIN PC BOARD Ass'y

PACKING



PACKING PARTS LIST

SYMBOL NO.	PART NO.	PART NAME	REMARKS	
1	CP10972-015-A	PACKING CASE		*
2	CP10725-00A-A	CUSHION ASSY	4pcs in 1set	*
3	CP30055-002-A	TOP COVER		*
4	CP30056-002-A	POLY. BAG		*
5	CM20926-00A-A	REC KEEPING CARD		*
6	RM-C424-KD	REMOCON		
7	CM21229-B01	SAFETY TIPS		
8	BT-20108	SERVICE INF CARD		
9	BT-20113	WARRANTY CARD		
10	AV2650S-US-IBA	INST. BOOK		

JVC SERVICE & ENGINEERING COMPANY OF AMERICA
DIVISION OF US JVC CORP.

Head office (East Coast)	: 107 Little Falls Road Fairfield, New Jersey 07006	(201)808-2100
Midwest	: 2250 Lively Blvd.,Elk Grove,Illinois 60007	(708)364-0880
Southwest	: 407 Garden Oaks Blvd.,Houston,Texas 77018	(713)694-3331
West Coast	: 5066 Corporate Avenue,Cypress,California 90630	(714)229-8011
Southeast	: 3040 Northwoods Parkway,Norcross,Georgia 30071	(404)441-9244
Hawaii	: 2969 Mapunapuna Place Honolulu, Hawaii 96819	(808)833-5828

JVC

AV2650SU-SJA

Printed in Jap
90 04 V.P.
MH/MH

JVC AV-2650S(US) SCHEMATIC DIAGRAM

NOTICE

The voltage reading and waveform are measured at each point with a multi-meter and an oscilloscope while receiving a service color bar signal with a sufficient sensitivity. The measurements were made with each VR under the condition just after the shipment. The figures of the signal circuits may be more or less different after adjustments, so use the figures simply for reference.

Multimeter used
DC 20kΩ/V
Given figures are all DC voltages.
Sweep speed of oscilloscope
H → 20 μS/div. V → 5 mS/div.
Others → sweep speed specified

Since the schematic diagram is a standard one, the circuit and circuit constants may be subject to change for improvement without any notice.

SAFETY

FR (FR) denotes a fusible resistor which operates as a fuse. When replacing fusible resistors parts indicated with black shading (▒▒▒) in the circuit diagrams, be sure to ensure safety.by using designated parts.
As to other parts too, use designated parts to maintain safety and performance.

INDICATION OF PARTS SYMBOL

Inside board (Example) SX-1227(H1) : R1209→R209
Outside board (Example) R0001→R01

SCHEMATIC DIAGRAM INDICATION

Resistor

- Resistance value
  Without unit: [Ω] K : [kΩ] M : [MΩ]
- Rated allowable power
  Without indication : 1/6W
  Others Indicated
- Type

Without indication	:	Carbon resistor
OMR	:	Oxide metal film resistor
UNFR	:	Unflammable resistor
MFR	:	Metal film resistor
FR	:	Fusible resistor

• Composition resistor 1/2 [W] is indicated as 1/2S or Comp.

Capacitor

- Capacitance
  Above 1 : [pF] Below 1 : [μF]
- Withstand Voltage
  Without indication : DC 50 [V]
  • Others : DC withstand voltage [V]
  AC indicated : AC withstand voltage [V]
- Indications for electrolytic capacitors are as follows.
  (Example)
  47/50 → capacitance [μF] / withstand voltage [V]
- Type

Without indication	:	Ceramic capacitor
MY	:	Mylar capacitor
MM	:	Metalized mylar capacitor
PP	:	Polypropylene capacitor
MPP	:	Metalized polypropylene capacitor
NP	:	Nonpolar electrolytic capacitor
BP	:	Bipolar electrolytic capacitor
TAN.	:	Tantalum capacitor

Coil
Without unit : [μH]

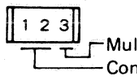
Power Supply
▬▬ : B_1 (129.3 V) ▬ ▬ : B_2 (12 V)
▬ ▬ ▬ : Standby Voltage (5 V)
• Each voltage reading specified.

Connection method
▭ : Connector ⟶ ⊣⊢ : Receptacle
o ○ : Wrapping or soldering

Test point & GND. symbol.
◉ : Test point by miniature GT pin
○ : Only test point display
⊥ : Live (Primary) side ground
⏚ : Neutral (Secondary) side ground

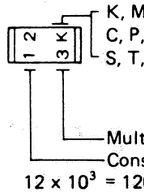
■ DECODING CHIP PARTS CONSTANT TERMS

< CHIP METAL GLAZE RESISTOR >



$12 \times 10^3 = 12000\ [\Omega] = 12\ [k\Omega]$ (Resistance)

< CHIP CERAMIC CAPACITOR >

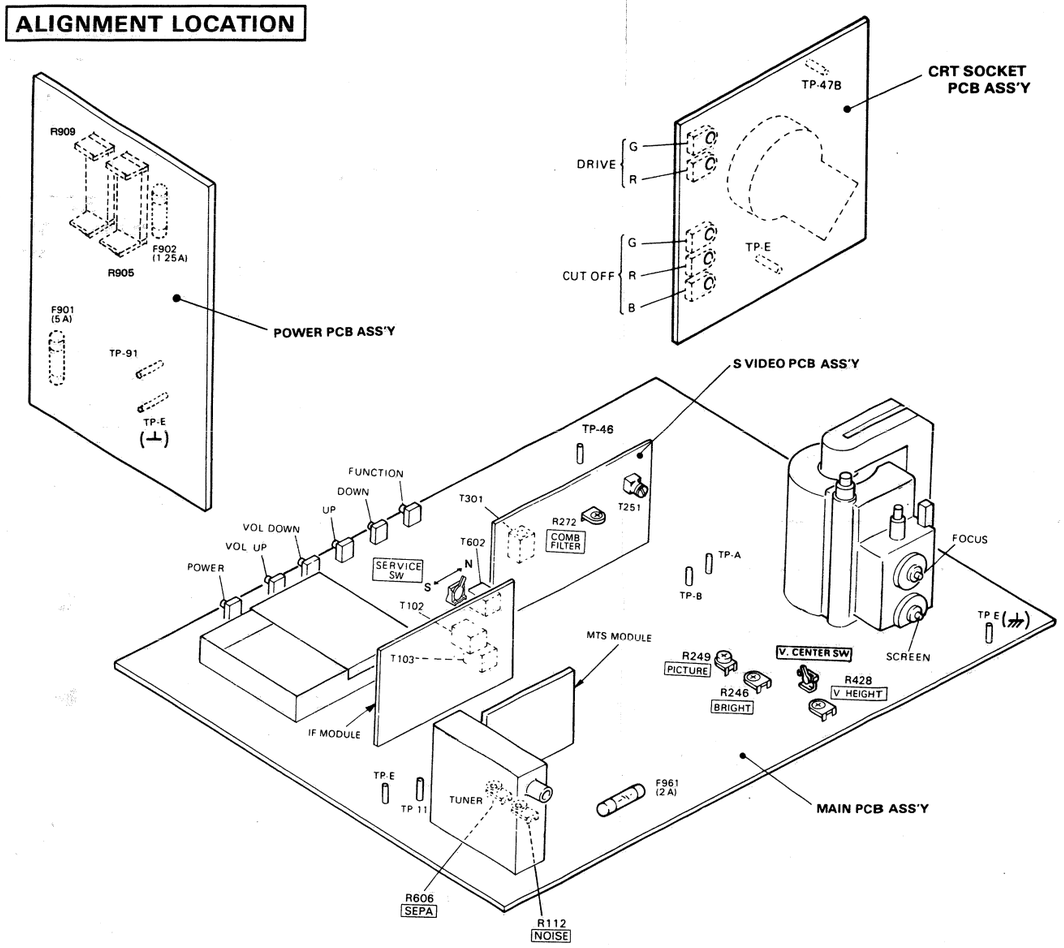

1 2 K
3
K, M, Z, P . . . Tolerance of ordinary type
C, P, R, ... Temperature coefficient of temperature compensation type
S, T, U
Multiplier
Constant term

$12 \times 10^3 = 12000\ [pF] = 0.012\ [\mu F]$ (Capacitance)

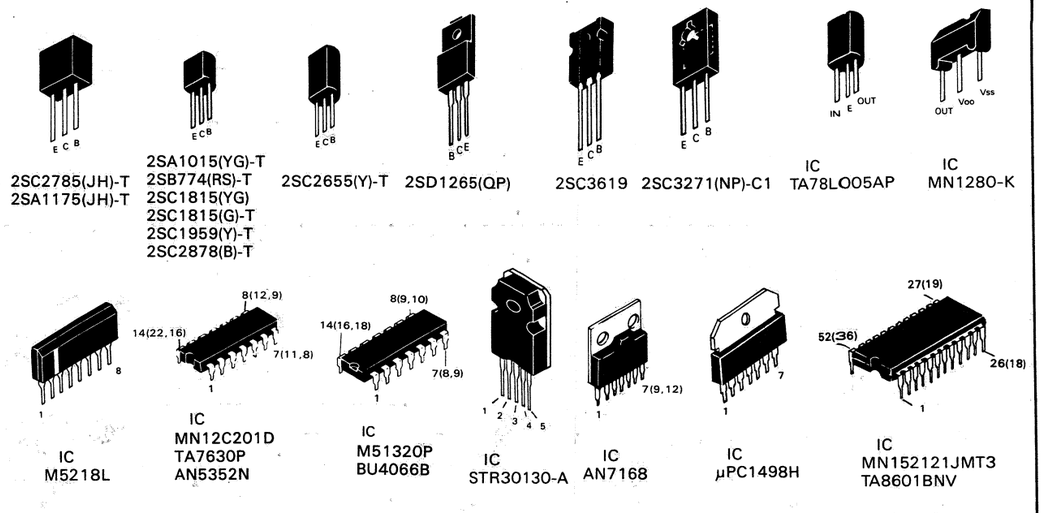
NOTE FOR SERVICE

This model's power circuit is partly different in the GND. The difference of the GND is shown by the LIVE (primary: ⊥) side GND and the NEUTRAL (secondary: ⏚) side GND.
Don't short between the LIVE side GND and NEUTRAL side GND or never measure with a measuring apparatus (oscilloscope etc.) the LIVE side GND and NEUTRAL side GND at the same time.
If above note will not be kept, a fuse or any parts will be broken.

ALIGNMENT LOCATION



Basing of Transistor & ICs



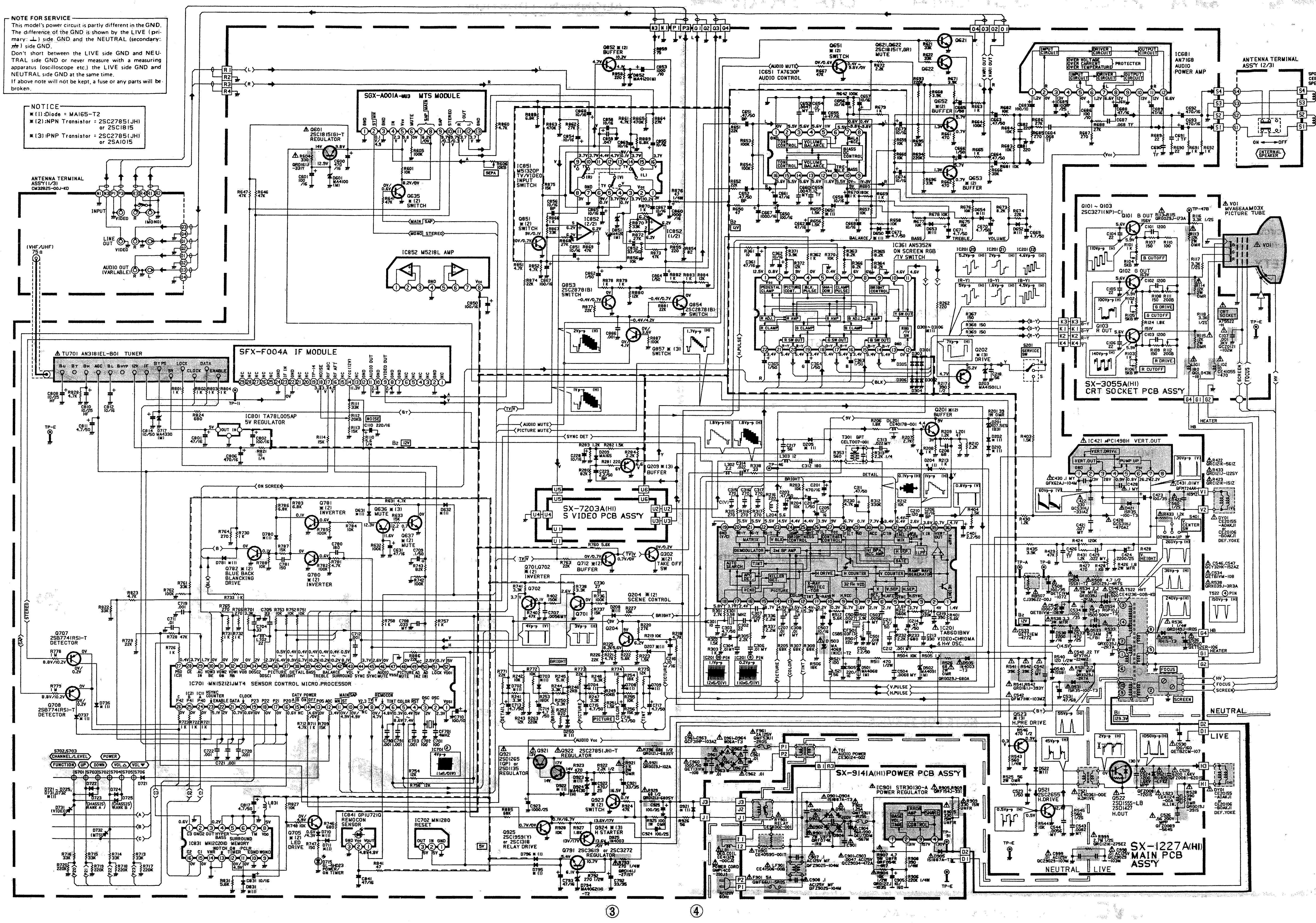
SCHEMATIC DIAGRAM

NOTE FOR SERVICE

This model's power circuit is partly different in the GND. The difference of the GND is shown by the LIVE (primary: ⊥) side GND and the NEUTRAL (secondary: ⫽) side GND.
Don't short between the LIVE side GND and NEUTRAL side GND or never measure with a measuring apparatus (oscilloscope etc.) the LIVE side GND and NEUTRAL side GND at the same time.
If above note will not be kept, a fuse or any parts will be broken.

NOTICE

- ✱(1):Diode = MA165-T2
- ✱(2):NPN Transistor = 2SC2785(JH) or 2SC1815
- ✱(3):PNP Transistor = 2SC2785(JH) or 2SA1015

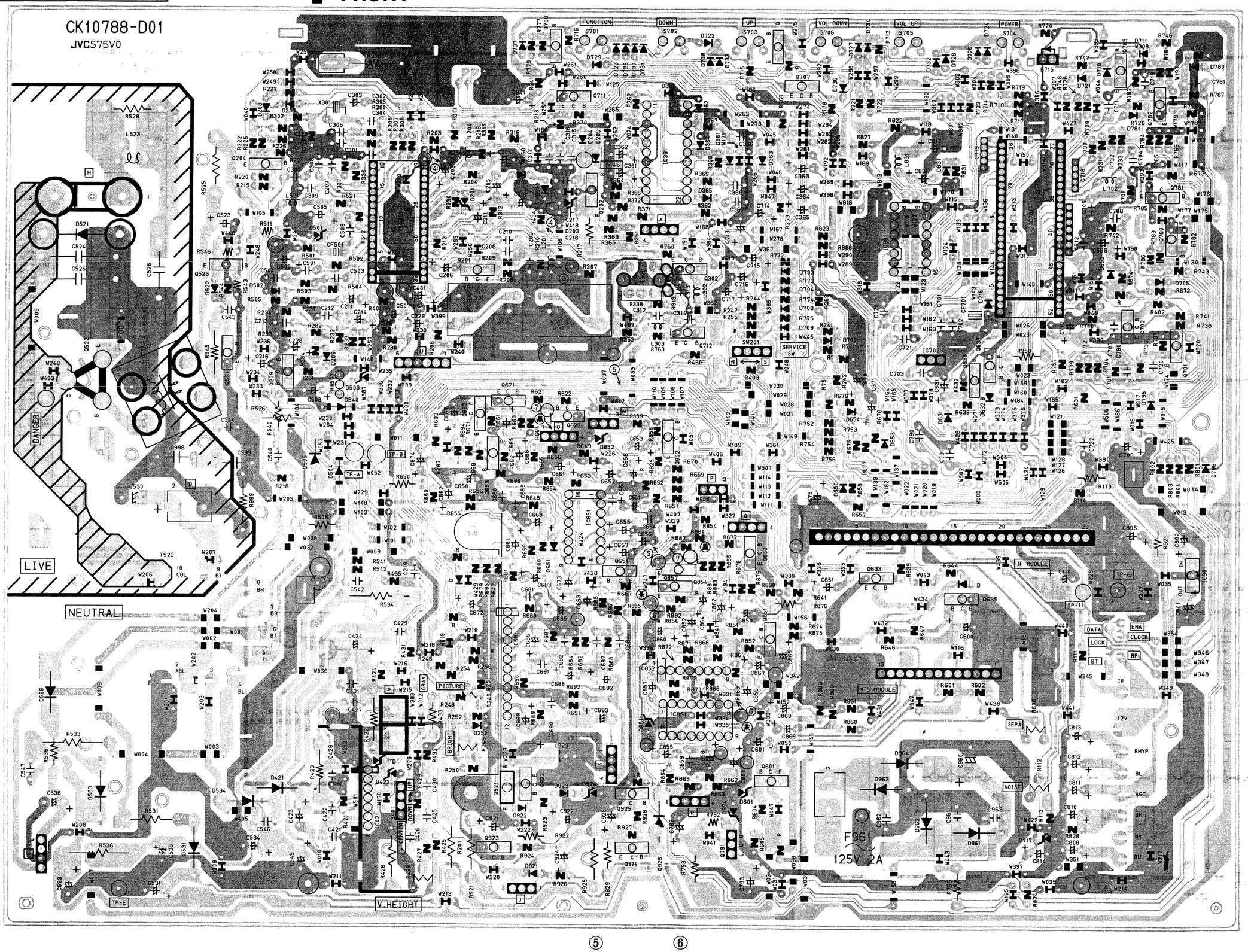


SGX-A001A-MU3 MTS MODULE
ANTENNA TERMINAL ASS'Y (1/3) CM32825-00J-KD
ANTENNA TERMINAL ASS'Y (2/3)
IC651 TA7630P AUDIO CONTROL
IC681 AN7168 AUDIO POWER AMP
IC851 M51320P TV/VIDEO INPUT SWITCH
IC852 M5218L AMP
IC361 AN5352N ON SCREEN RGB /TV SWITCH
TU701 AN3181EL-B01 TUNER
SFX-F004A IF MODULE
IC801 TA78L005AP 5V REGULATOR
SX-3055A(HI) CRT SOCKET PCB ASS'Y
V01 MVA66AAM03X PICTURE TUBE
SX-7203A(HI) S VIDEO PCB ASS'Y
IC421 μPC1498H VERT.OUT
IC201 TA8601BNV VIDEO•CHROMA & H•V OSC.
IC701 MN15212IJMT4 SENSOR CONTROL MICRO PROCESSOR
IC831 MN12C201D MEMORY
IC841 GP1U721Q REMOCON SENSOR
IC702 MN1280 RESET
SX-9141A(HI) POWER PCB ASS'Y
IC901 STR30130-A POWER REGULATOR
SX-1227A(HI) MAIN PCB ASS'Y
NEUTRAL
LIVE
③
④

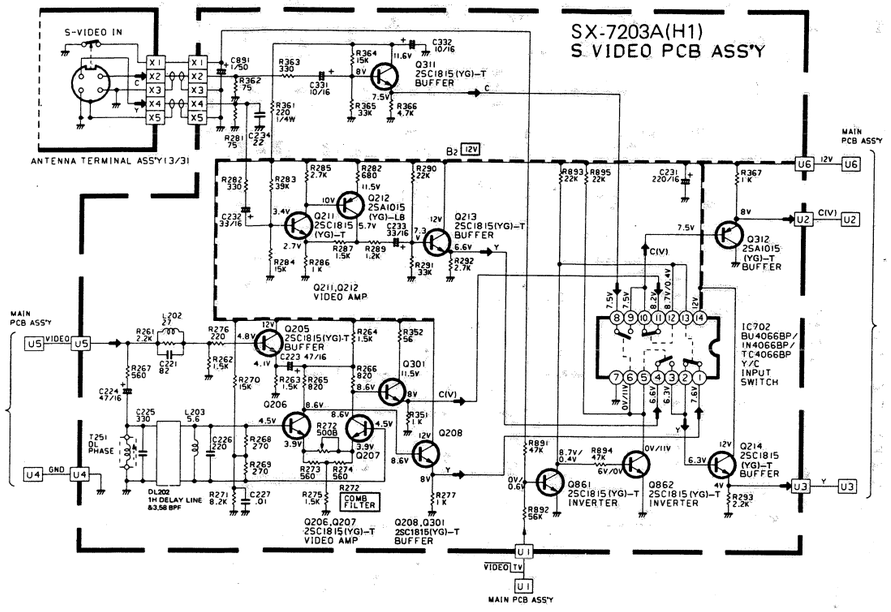
MAIN PCB BACK PATTERN

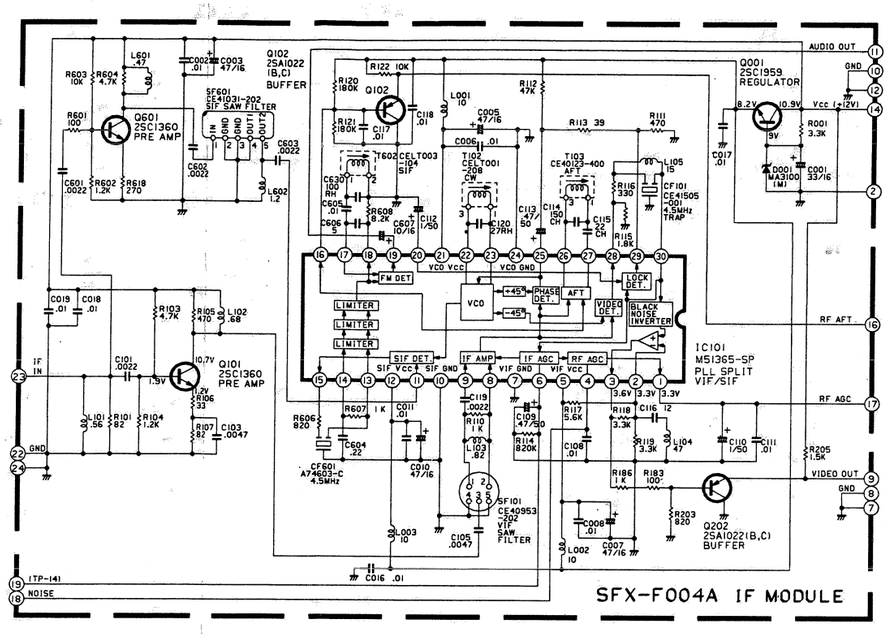
FRONT

Ⓐ **AV-2650S** **AV-2650S** Ⓐ



⑤ ⑥



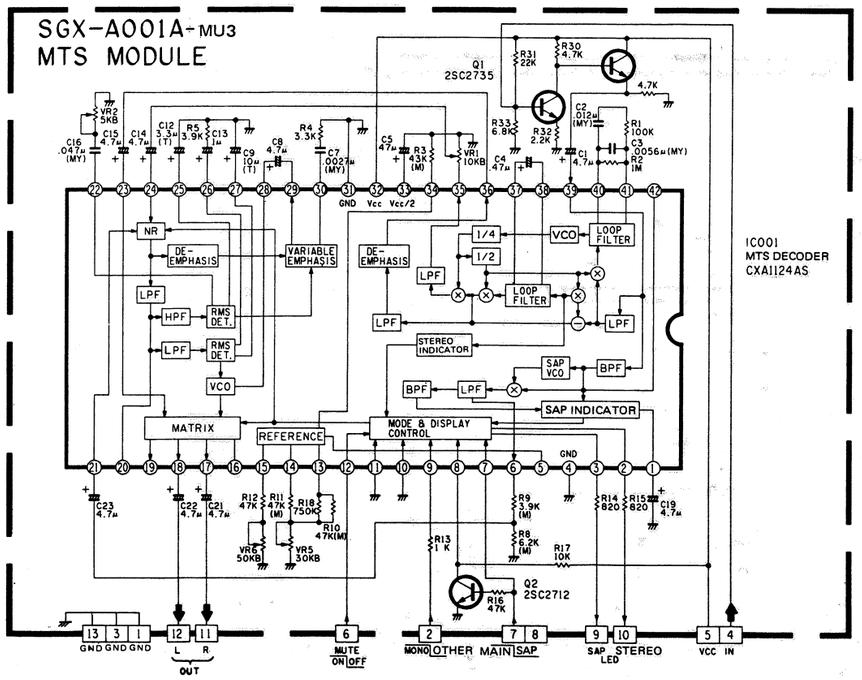


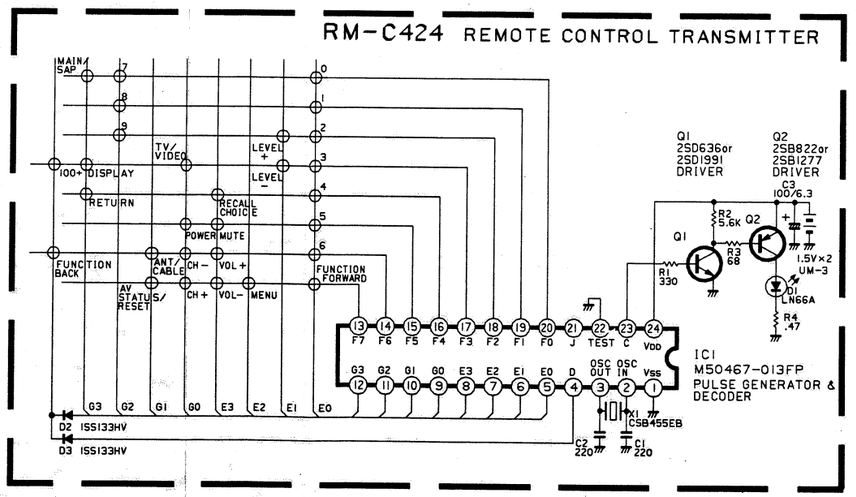
■ CHANNEL CHART

MODE T	MODE V	MODE CATV	BAND	CHANNEL REAL	CHANNEL DISPLAY	TUNER BAND
			VL	02		
				03		
				04		I
				05		
				06		
○	○			07		
			VH	08		
				09		
				10		II
				11		
				12		
				13		
			MID	A	14	I
				B	15	
				C	16	
				D	17	
				E	18	
				F	19	
				G	20	
				H	21	
				I	22	
			SU PER	J	23	
				K	24	
				L	25	
				M	26	
				N	27	
				O	28	
				P	29	
				Q	30	
				R	31	
				S	32	
				T	33	
				U	34	
				V	35	
				W	36	
			HY PER	W+1	37	
				W+2	38	
				W+3	39	
				W+4	40	
				W+5	41	
				W+6	42	
				W+7	43	
				W+8	44	
				W+9	45	
				W+10	46	
				W+11	47	
				W+12	48	
				W+13	49	
				W+14	50	
				W+15	51	
				W+16	52	
				W+17	53	
				W+18	54	
				W+19	55	
				W+20	56	
				W+21	57	
				W+22	58	
				W+23	59	
				W+24	60	
				W+25	61	
				W+26	62	
				W+27	63	
				W+28	64	
			UL TRA	W+29	65	IV
				W+30	66	
				W+31	67	
				W+32	68	
				W+33	69	
				W+34	70	
				W+35	71	
				W+36	72	
				W+37	73	
				W+38	74	
				W+39	75	
				W+40	76	
				W+41	77	
				W+42	78	
				W+43	79	
				W+44	80	
				W+45	81	
				W+46	82	
				W+47	83	
				W+48	84	
				W+49	85	
				W+50	86	
				W+51	87	
				W+52	88	
				W+53	89	
				W+54	90	
				W+55	91	
				W+56	92	
				W+57	93	
				W+58	94	
				W+59	100	
				W+60	101	
				W+61	102	
				W+62	103	
				W+63	104	
				W+64	105	
				W+65	106	
				W+66	107	
				W+67	108	
				W+68	109	
				W+69	110	
				W+70	111	
				W+71	112	
				W+72	113	
				W+73	114	
				W+74	115	
				W+75	116	
				W+76	117	
				W+77	118	
				W+78	119	
				W+79	120	
				W+80	121	
				W+81	122	
				W+82	123	
				W+83	124	
				W+84	125	
×	○		UL TRA	W+85	126	IV
				W+86	127	
				W+87	128	
				W+88	129	
				W+89	130	
				W+90	131	
				W+91	132	
				W+92	133	
				W+93	134	
				W+94	135	
				W+95	136	
				W+96	137	
				W+97	138	
				W+98	139	
				W+99	140	
				W+100	141	
				W+101	142	
				W+102	143	
				W+103	144	
				W+104	145	
				W+105	146	
				W+106	147	
				W+107	148	
				W+108	149	
				W+109	150	
				W+110	151	
				W+111	152	
				W+112	153	
				W+113	154	
				W+114	155	
				W+115	156	
				W+116	157	
				W+117	158	
				W+118	159	
				W+119	160	
				W+120	161	
				W+121	162	
				W+122	163	
				W+123	164	
				W+124	165	
				W+125	166	
			SUB MID	A-8	01	I
				A-4	96	
				A-3	97	
				A-2	98	
				A-1	99	
○	×		UHF	14 ~ 69		IV

TOTAL 180 ch { VHF 124 ch / UHF 56 ch }

NOTE: TO RECEIVE THE SUBSCRIPTION OR PREMIUM PROGRAMMING FROM CERTAIN CABLE COMPANIES. SPECIAL ADAPTERS MAY BE REQUIED.





1767

JVC

SERVICE MANUAL

26" COLOR MONITOR / RECEIVER

AV-2650S(us)

Supplementary

BASIC CHASSIS
FXIII

INFORMATION

In accordance with the production form change of the PARTS No. have been changed.
Therefore,we issued an amended PARTS LIST and SCHEMATIC DIAGRAM.
Please use the new PARTS LST and SCHEMATIC DIAGRAM together with the existing original manual (No.50387 Apr. 1990).

COPYRIGHT © 1990 VICTOR COMPANY OF JAPAN,LTD.

No.50387B
July 1990

PARTS LIST

CAUTION

- The parts marked ⚠ are very important for the safety. When replacing these parts, be sure to use specified ones to secure the safety and performance.
- The module circuit board is supplied together with the assembly, but the parts which do not have the drawing in this Parts List, P. C. Board Ass'y and the Parts No. columns of which are filled with lines —— . will not be supplied.
- As a rule, the resistors and capacitors which are indicated as shown in (NOTE 2) "HOW TO EXPRESS PARTS NUMBERS OF STANDARD PARTS" are not shown in the list of the parts on the board.
  When ordering the service parts, confirm the resistance/rated power, capacitance/rated voltage, and type of the parts, then order by the part No. indicated according to (NOTE 2).

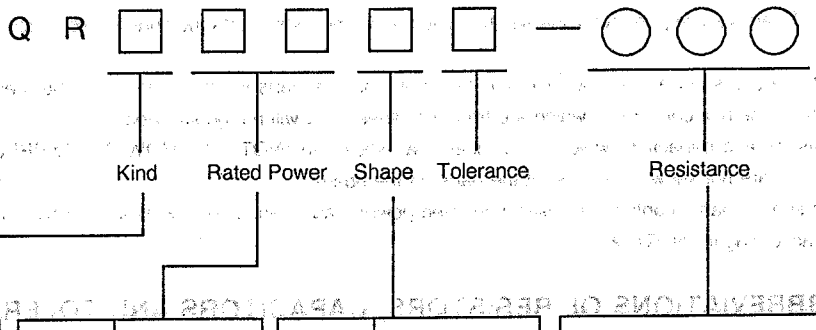
(NOTE 1) ABBREVIATIONS OF RESISTORS, CAPACITORS AND TOLERANCES

RESISTORS		CAPACITORS	
C R	Carbon Resistor	C CAP.	Ceramic Capacitor
F R	Fusible Resistor	E CAP.	Electrolytic Capacitor
P R	Plate Resistor	M CAP.	Mylar Capacitor
V R	Variable Resistor	HV CAP.	High Voltage Capacitor
HV R	High Voltage Resistor	MF CAP.	Metalized Film Capacitor
MF R	Metal Film Resistor	MM CAP.	Metalized Mylar Capacitor
MG R	Metal Glazed Resistor	MP CAP.	Metalized Polystyrol Capacitor
MP R	Metal Plate Resistor	PP CAP.	Polypropylene Capacitor
OM R	Metal Oxide Film Resistor	PS CAP.	Polystyrol Capacitor
CMF R	Coating Metal Film Resistor	TF CAP.	Thin Film Capacitor
UNF R	Non-Flammable Resistor	MPP CAP.	Metalized Polypropylene Capacitor
CH V R	Chip Variable Resistor	TAN. CAP.	Tantalum Capacitor
CH MG R	Chip Metal Glazed Resistor	CH C CAP.	Chip Ceramic Capacitor
COMP. R	Composition Resistor	BP E CAP.	Bi-Polar Electrolytic Capacitor
LPTC R	Linear Positive Temperature Coefficient Resistor	CH AL E CAP.	Chip Aluminum Electrolytic Capacitor
		CH AL BP CAP.	Chip Aluminum Bi-Polar Capacitor
		CH TAN. E CAP.	Chip Tantalum Electrolytic Capacitor
		CH AL BP E CAP.	Chip Tantalum Bi-Polar Electrolytic Capacitor

TOLERANCES									
F	G	J	K	M	N	R	H	Z	P
±1%	±2%	±5%	±10%	±20%	±30%	+30% -10%	+50% -10%	+80% -20%	+100% -0%

(NOTE 2) HOW TO EXPRESS PARTS NUMBERS OF STANDARD PARTS

■ RESISTOR



Symbol	Part Name
C	COMP.R
D	C R
S	CH MG R

Symbol	Rated Power
0 1	1 w
1 2	1/2 w
1 4	1/4 w
1 6	1/6 w
1 8	1/8 w

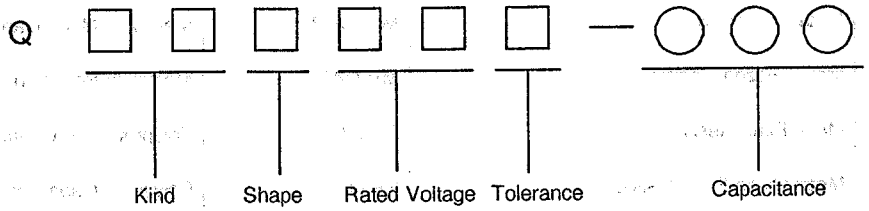
Symbol	Shape
1	Straight lead
8	Chip

Indicate with first two-figure expressed by Ω and following 0.
please note that,in case of resistance less than 10 Ω, a letter "R"will be effective as point.

EX.

2.2 Ω	=		2R2
470 Ω	=	47×10^1 →	471
150kΩ	=	15×10^4 →	154

■ CAPACITOR



Symbol	Part Name
CS	C CAP.
CS	CH C CAP.
ET	E CAP.
FM	M CAP.

5Figure / 6Figure	0	1	2
A		10V	100V
C		16V	160V
D			200V
E		25V	250V
H		50V	500V
J	6.3V	63V	
V		35V	

Indicate with first two-figure expressed by pF and following 0.
Please note that,in case of capacitance less than 10 pF a letter "R" will be effective as point.

EX

5pF	=		5R0
1000pF	=	10×10^2 →	102
47μF	=	47×10^6 →	476

Symbol	Shape
1	Straight lead
1	Leads in the same direction
8	Chip
A	Leads in the same direction (compact part)

MAIN PARTS LIST

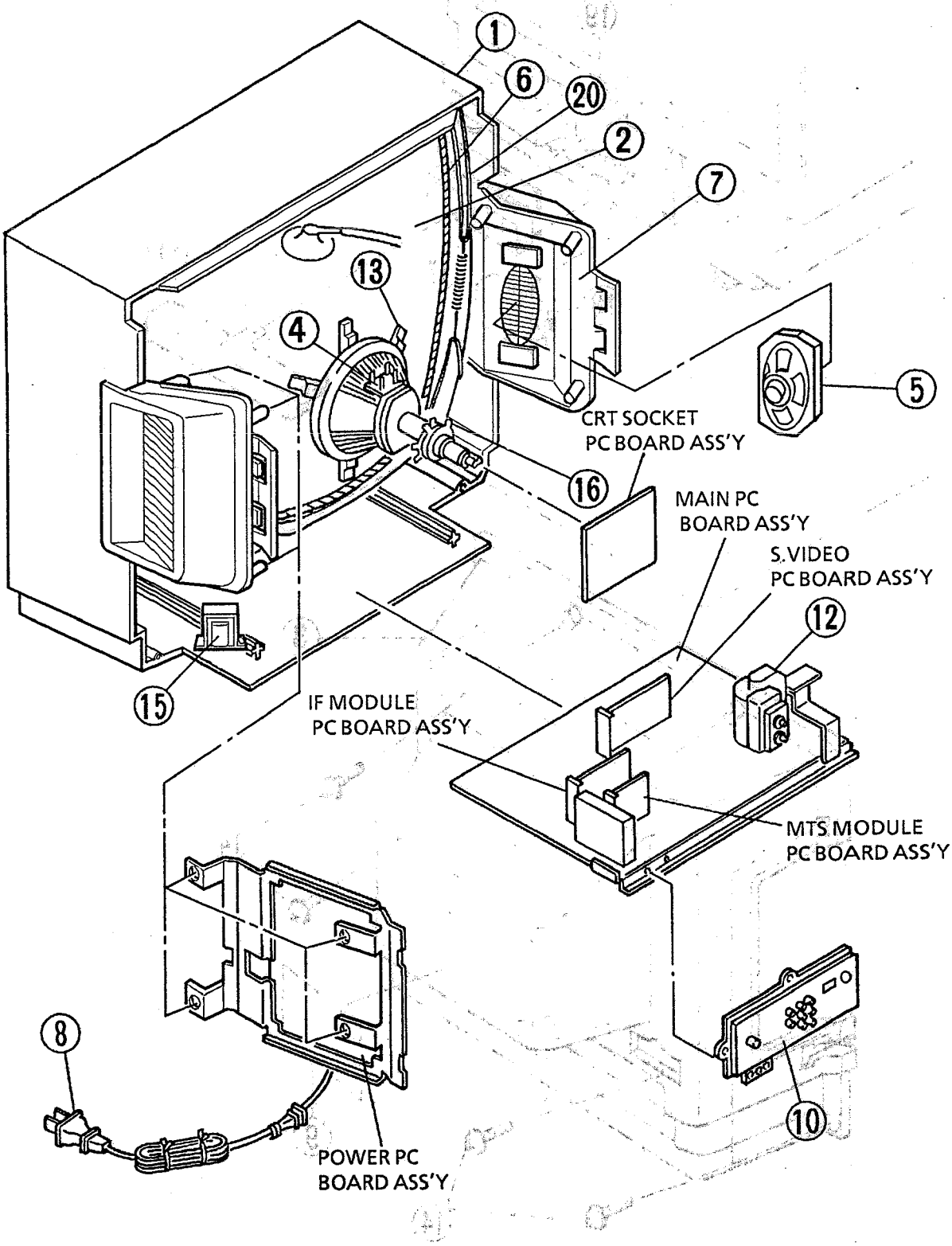
SYMBOL NO.	⚠	PART NO.	PART NAME	REMARKS
CRT & TUNER				
		CE41595-00AJ1	WEDGE ASSY	X4 *
		A75034-B	P&C MAGNET	
	⚠	CE20155-A0AKJ1	DEF YOKE ASSY	DY01 *
	⚠	CE41329-00CJ2	DEG COIL	L01 *
TU1701	⚠	AN3181EL-B01	TUNER	TU1701
	⚠	MVA66AAM03X	PICTURE TUBE	V01 *
VARIABLE R				
R1112		QVPE610-203H	V R (NOISE)	20kΩ B
R1246		QVPE610-202H	V R (BRIGHT)	2kΩ B
R1249		QVPE610-103H	V R (PICTURE)	10kΩ B
R1428		QVPE610-102H	V R (V. HEIGHT)	1kΩ B
R1606		QVPE610-103H	V R (SEPA)	10kΩ B
R3104		QVPA803-502M	V R (B. CUT OFF)	5kΩ B
R3105		QVPA803-502M	V R (G. CUT OFF)	5kΩ B
R3106		QVPA803-502M	V R (R. CUT OFF)	5kΩ B
R3111		QVPA803-201M	V R (G. DRIVE)	200 Ω B
R3112		QVPA803-201M	V R (R. DRIVE)	200 Ω B
R7272		QVPA802-501M	V R (COMB FILTER)	500 Ω B
TRANSFORMER				
	⚠	CE30124-002J2	POWER TRANSF.	T01 *
T1521	⚠	CE40361-00E	DRIVE TRANSF.	
	⚠	CE41236-00B-KD	H. V. TRANSF.	T1522
DIODE				
D1201		RD7.5ES(B3)-T2	ZENER DIODE	
D1203		MA4150(L)-T2	ZENER DIODE	
D1501		MA4068(M)-T2	ZENER DIODE	
D1502		MA4091(M)-T2	ZENER DIODE	
D1503	⚠	MA4068(N)C1-T2	ZENER DIODE	
D1601		MA4100(M)-T2	ZENER DIODE	
D1715		GL-5HD23	L. E. D.	POWER/ON TIMER
D1717		MA4330(M)-T2	ZENER DIODE	
D1794		MA4062(H)-T2	ZENER DIODE	
D1851		MA4120(M)-T2	ZENER DIODE	
D1852		MA4120(M)-T2	ZENER DIODE	
D1924		MA4130(H)-T2	ZENER DIODE	
TRANSISTOR				
Q1522	⚠	2SD1555-LB	SI. TRANSISTOR	H. OUT or 2SD1427-LB
IC				
IC1201	⚠	TA8601BNV	I. C.	
IC1361		AN5352N	I. C. (M)	
IC1421	⚠	UPC1498H	I. C.	
IC1651		TA7630P	I. C. (M)	
IC1681		AN7168	I. C. (M)	
IC1701		MN152121JMT3	I. C. (M)	
IC1702		MN1280-K	I. C. (M)	
IC1801		TA78L005AP	I. C.	
IC1831		MN12C201D	I. C. (M)	
IC1841		GP1U521Y	IR DETECT UNIT	
IC1851		M51320P	I. C. (M)	
IC1852		M5218L	I. C.	
IC7202		BU4066B	I. C.	or MN4066B
IC9901	⚠	STR30130-A	I. C. (H)	
OTHERS				
		SGX-A001A-MU3	MTS MODULE PC BO	
		CM11179-001-MA	FRONT CABINET AS	*
		CM21448-001-MA	FRONT GRILLE	*

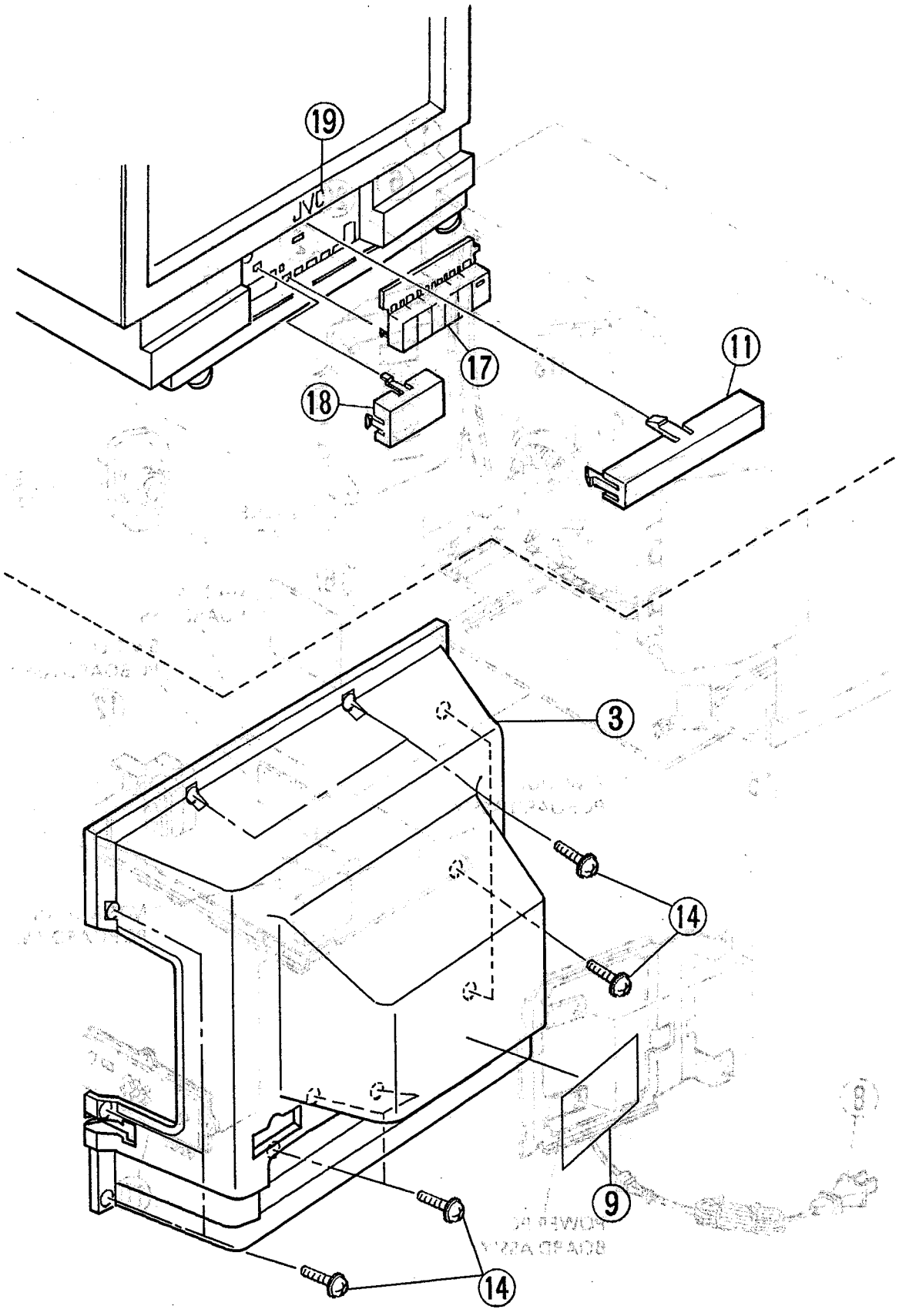
SYMBOL NO.	⚠	PART NO.	PART NAME	REMARKS
OTHERS				
		CM32864-A0A-KD	KNOB ASSY	
	⚠	QMP14C0-200J3	POWER CORD	*
		CM32825-00J-KD	ANT TERMINAL	
		CM11180-001-MA	REAR COVER	*
CF1501		CSB503F17	C. RESONATOR	
DL1201		CE40178-001	DELAY LINE	
DL7202		CE40907-A01	1H DELAY LINE	
FI961	⚠	QMF53U1-2R0S	FUSE	2.0A
F9901	⚠	QMF66U1-5R0S	FUSE	5.0A
F9902	⚠	QMF53U1-1R25S	FUSE	1.25A
LF9901	⚠	CE41506-00BJ1	LINE FILTER	
RY9901	⚠	CESK002-001	RELAY	
		CEBSN12D-01KJ3	SPEAKER	SP01, SP02 *
S1201		QSL4A13-C02	LEVER SWITCH	SERVICE SW
S1401		QSL4A13-C02	LEVER SWITCH	V. CENTER SW
S1701		QSP4H11-C03	PUSH SWITCH	FUNCTION
S1702		QSP4H11-C03	PUSH SWITCH	CH/LEVEL DOWN
S1703		QSP4H11-C03	PUSH SWITCH	CH/LEVEL UP
S1704		QSP4H11-C03	PUSH SWITCH	POWER
S1705		QSP4H11-C03	PUSH SWITCH	VOL △
S1706		QSP4H11-C03	PUSH SWITCH	VOL ▽
TH9901	⚠	CE40595-001	TH POSISTOR	or CE40595-001T
X1301		CE40668-001J1	CRYSTAL	

EXPLODED VIEW PARTS LIST

SYMBOL NO.		PART NO.	PART NAME	REMARKS
1		CM11179-001-MA	FRONT CABINET AS	*
2	⚠	MVA66AAM03X	PICTURE TUBE	V01 *
3		CM11180-001-MA	REAR COVER	*
4	⚠	CE20155-A0AKJ1	DEF YOKE ASSY	DY01 *
5		CEBSN12D-01KJ3	SPEAKER	SP01, SP02 *
6	⚠	CE41329-00CJ2	DEG COIL	L01 *
7		CM11188-001-MA	SP GRILLE	X2 *
8	⚠	QMP14C0-200J3	POWER CORD	*
9		CM44889-001-A	RATING LABEL	*
10		CM32825-00J-KD	ANT TERMINAL	
11		CM21448-001-MA	FRONT GRILLE	*
12	⚠	CE41236-00B-KD	H. V. TRANSF.	T1522
13		CE41595-00AJ1	WEDGE ASSY	X4 *
14		GBSB4016N	W TAP SCREW	X11 *
15	⚠	CE30124-002J2	POWER TRANSF.	T01 *
16		A75034-B	P&C MAGNET	
17		CM32864-A0A-KD	KNOB ASSY	
18		CM32363-011-V0	REMOCON WINDOW	
19		CM43094-002	JVC MARK	
20		CH30336-00A	BRAIDED ASSY	

EXPLODED VIEW




19
JVC
17
18
11
3
14
14
9

PRINTED CIRCUIT BOARD PARTS LIST

MAIN PC BOARD Ass'y (SX-1227A(H2))

	SYMBOL NO.	PART NO.	PART NAME	REMARKS		
	VARIABLE R					
	R1112	QVPE610-203H	V R (NOISE)	20kΩ B		
	R1246	QVPE610-202H	V R (BRIGHT)	2kΩ B		
	R1249	QVPE610-103H	V R (PICTURE)	10kΩ B		
	R1428	QVPE610-102H	V R (V. HEIGHT)	1kΩ B		
	R1606	QVPE610-103H	V R (SEPA)	10kΩ B		
	RESISTOR					
⚠	RB1507	CJ39622-00J	R BLOCK			
	R1201	QRG019J-390S	OM R	39 Ω	1W	J
	R1217	QRZ0075-391YJ2	C R	390 Ω	1/2W	J
	R1313	QRZ0089-222XJ2	C R	2.2kΩ	1/4W	J
⚠	R1422	QRC121K-561Z	COMP. R	560 Ω	1/2W	K
	R1426	QRX029J-1R8A	MF R	1.8 Ω	2W	J
⚠	R1433	QRZ0075-122YJ2	C R	1.2kΩ	1/2W	J
⚠	R1508	QRD129J-4R7SJ2	C R	4.7 Ω	1/2W	J
	R1511	QRZ0090-471XJ2	C R	470 Ω	1/2W	J
	R1525	QRG029J-560A	OM R	56 Ω	2W	J
⚠	R1526	QRG029J-680A	OM R	68 Ω	2W	J
⚠	R1528	QRG019J-391S	OM R	390 Ω	1W	J
⚠	R1531	QRX029J-2R7A	MF R	2.7 Ω	2W	J
⚠	R1533	QRX039J-2R7A	MF R	2.7 Ω	3W	J
⚠	R1534	QRX039J-2R2A	MF R	2.2 Ω	3W	J
⚠	R1536	QRD149J-1R0SJ2	C R	1.0 Ω	1/4W	J
⚠	R1538	QRX039J-3R3A	MF R	3.3 Ω	3W	J
	R1540	QRZ0075-121YJ2	C R	120 Ω	1/2W	J
⚠	R1541	QRD161J-393YJ2	C R	39kΩ	1/6W	J
⚠	R1542	QRD161J-393YJ2	C R	39kΩ	1/6W	J
	R1543	QRZ0089-561XJ2	C R	560 Ω	1/4W	J
⚠	R1604	QRD161J-331YJ2	C R	330 Ω	1/6W	J
	R1758	QRZ0074-102YJ2	C R	1kΩ	1/4W	J
	R1792	QRZ0090-271XJ2	C R	270 Ω	1/2W	J
⚠	R1793	QRZ0074-271YJ2	C R	270 Ω	1/4W	J
⚠	R1796	QRZ0075-683YJ2	C R	68kΩ	1/2W	J
	R1821	QRD149J-100SJ2	C R	10 Ω	1/4W	J
	R1876	QRD149J-470SJ2	C R	47 Ω	1/4W	J
⚠	R1921	QRG029J-102A	OM R	1kΩ	2W	J
	R1925	QRG019J-101S	OM R	100 Ω	1W	J
⚠	R1929	QRZ0075-680YJ2	C R	68 Ω	1/2W	J
⚠	R1999	QRC121K-275EZ	COMP. R	2.7MΩ	1/2W	K
	CAPACITOR					
	C1206	QEN61CM-106ZJ3	BP E CAP.	10μF	16V	M
	C1212	QFN31HK-102ZJ1	M CAP.	1000pF	50V	K
	C1229	QEN61HM-225ZJ3	BP E CAP.	2.2μF	50V	M
	C1303	QEN61HM-475ZJ3	BP E CAP.	4.7μF	50V	M
	C1307	QFV71HJ-563MZ	TF CAP.	0.056μF	50V	J
	C1401	QEM61HK-225MZ	E CAP.	2.2μF	50V	K
⚠	C1422	QCS31HJ-331ZJ5	CH C CAP.	330pF	50V	J
	C1426	QFV71HJ-274MZ	TF CAP.	0.27μF	50V	J
⚠	C1428	QCS31HJ-470ZJ5	CH C CAP.	47pF	50V	J
⚠	C1430	QFK62AJ-104M	MM CAP.	0.1μF	100V	J
⚠	C1431	QFN32AK-103ZJ1	M CAP.	0.01μF	100V	K
	C1503	QFN31HK-562ZJ1	M CAP.	5600pF	50V	K
	C1504	QFN31HK-682ZJ1	M CAP.	6800pF	50V	K
⚠	C1508	QETC1VM-107ZJ5	E CAP.	100μF	35V	M
	C1509	QFN31HK-272ZJ1	M CAP.	2700pF	50V	K
⚠	C1524	QFZ0081-7201S	MPP CAP.	7200pF	1600V	±3%
⚠	C1525	QFZ0081-6201S	MPP CAP.	6200pF	1600V	±3%
⚠	C1526	QFZ0089-564S	MPP CAP.	0.56μF	1600V	±3%
⚠	C1530	QETB2CM-107	E CAP.	100μF	160V	M
⚠	C1533	QETC1EM-477ZJ5	E CAP.	470μF	25V	M
⚠	C1536	QET52ER-106	E CAP.	10μF	250V	R

	SYMBOL NO.	PART NO.	PART NAME	REMARKS
	CAPACITOR			
⚠	C1540	QFV71HJ-224MZ	TF CAP.	0.22μF 50V J
⚠	C1542	QFM71HK-103MZ	M CAP.	0.01μF 50V K
⚠	C1545	QETB1VM-108J3	E CAP.	1000μF 35V M
⚠	C1546	QCY32HK-152AZ	CH C CAP.	1500pF 500V K
⚠	C1547	QCY32HK-152AZ	CH C CAP.	1500pF 500V K
	C1651	QEN61HM-474ZJ3	BP E CAP.	0.47μF 50V M
	C1652	QEN61HM-474ZJ3	BP E CAP.	0.47μF 50V M
	C1653	QFN31HJ-472ZJ1	M CAP.	4700pF 50V J
	C1654	QFV71HJ-124MZ	TF CAP.	0.12μF 50V J
	C1659	QFV71HJ-124MZ	TF CAP.	0.12μF 50V J
	C1660	QFN31HJ-472ZJ1	M CAP.	4700pF 50V J
	C1684	QFV71HJ-683MZ	TF CAP.	0.068μF 50V J
	C1687	QFV71HJ-683MZ	TF CAP.	0.068μF 50V J
	C1690	QFV71HJ-104MZ	TF CAP.	0.1μF 50V J
	C1691	QFV71HJ-104MZ	TF CAP.	0.1μF 50V J
	C1707	QFN31HK-562ZJ1	M CAP.	5600pF 50V K
	C1709	QEB61HM-104MZ	E CAP.	0.1μF 50V M
	C1806	QEM51CM-477M	E CAP.	470μF 16V M
	C1808	QEM61EK-106MZ	E CAP.	10μF 25V K
	C1810	QEM61EK-106MZ	E CAP.	10μF 25V K
	C1856	QEN61CM-106ZJ3	BP E CAP.	10μF 16V M
	C1857	QEN61CM-106ZJ3	BP E CAP.	10μF 16V M
⚠	C1960	QETB1VM-108J3	E CAP.	1000μF 35V M
⚠	C1961	QCF31HP-103ZJ5	CH C CAP.	0.01μF 50V P
⚠	C1962	QCF31HP-103ZJ5	CH C CAP.	0.01μF 50V P
⚠	C1963	QCF31HP-103ZJ5	CH C CAP.	0.01μF 50V P
⚠	C1998	QCZ9029-103M	C CAP.	0.01μFAC125V K
⚠	C1999	QCZ9029-103M	C CAP.	0.01μFAC125V K
	TRANSFORMER			
	T1301	CELT007-001	3.58 B.P. TRANSF.	
⚠	T1521	CE40361-00E	DRIVE TRANSF.	
	COIL			
	L1201	A76186-47Z-T	PEAKING COIL	47μH
	L1204	A76186-5.6Z-T	PEAKING COIL	5.6μH
	L1302	A76186-2.2Z-T	PEAKING COIL	2.2μH
	L1303	A76186-12Z-T	PEAKING COIL	12μH
	L1521	A76186-56Z-T	PEAKING COIL	56μH
⚠	L1523	CE41124-00A	LINIARITY COIL	
	L1702	CE40041-220ZJ1	PEAKING COIL	
	L1831	A76186-1.0Z-T	PEAKING COIL	1.0μH
	DIODE			
	D1201	RD7.5ES(B3)-T2	ZENER DIODE	
	D1202	MA165-T2	SI. DIODE	
	D1203	MA4150(L)-T2	ZENER DIODE	
	D1204	MA165-T2	SI. DIODE	
	D1205	MA165-T2	SI. DIODE	
	D1207	MA165-T2	SI. DIODE	
	D1208	MA165-T2	SI. DIODE	
	D1209	MA165-T2	SI. DIODE	
	D1210	MA165-T2	SI. DIODE	
	D1250	MA165-T2	SI. DIODE	
	D1301	MA165-T2	SI. DIODE	
	D1302	MA165-T2	SI. DIODE	
	D1303	MA165-T2	SI. DIODE	
	D1304	MA165-T2	SI. DIODE	
	D1305	MA165-T2	SI. DIODE	
	D1306	MA165-T2	SI. DIODE	
⚠	D1421	1SR35-100-T3	SI. DIODE	
	D1501	MA4068(M)-T2	ZENER DIODE	
	D1502	MA4091(M)-T2	ZENER DIODE	

	SYMBOL NO.	PART NO.	PART NAME	REMARKS
	DIODE			
⚠	D1503	MA4068 (N) C1-T2	ZENER DIODE	
⚠	D1504	1SS81-T2	SI. DIODE	
⚠	D1505	1N4003-T3	SI. DIODE	
⚠	D1521	RU4DS-LFK2	SI. DIODE	
	D1522	MA165-T2	SI. DIODE	
⚠	D1531	1SR35-100-T3	SI. DIODE	
⚠	D1533	RU3AM-LFB1	SI. DIODE	
⚠	D1534	RGP10J-T3	SI. DIODE	
⚠	D1536	RH1S-T3	SI. DIODE	
	D1540	1SS81-T2	SI. DIODE	
	D1601	MA4100 (M) -T2	ZENER DIODE	
	D1631	MA165	SI. DIODE	
	D1632	MA165	SI. DIODE	
	D1650	MA165-T2	SI. DIODE	
	D1651	MA165-T2	SI. DIODE	
	D1652	MA165-T2	SI. DIODE	
	D1653	MA165-T2	SI. DIODE	
	D1654	MA165-T2	SI. DIODE	
	D1702	MA165-T2	SI. DIODE	
	D1703	MA165-T2	SI. DIODE	
	D1704	MA165-T2	SI. DIODE	
	D1708	MA165-T2	SI. DIODE	
	D1709	MA165-T2	SI. DIODE	
	D1710	MA165-T2	SI. DIODE	
	D1711	MA165-T2	SI. DIODE	
	D1715	GL-5HD23	L. E. D.	POWER/ON TIMER
	D1717	MA4330 (M) -T2	ZENER DIODE	
	D1721	MA165-T2	SI. DIODE	
	D1722	MA165-T2	SI. DIODE	
	D1723	MA165-T2	SI. DIODE	
	D1724	MA165-T2	SI. DIODE	
	D1725	MA165-T2	SI. DIODE	
	D1731	MA165-T2	SI. DIODE	
	D1732	MA165-T2	SI. DIODE	
	D1736	MA165-T2	SI. DIODE	
	D1737	MA165-T2	SI. DIODE	
	D1780	MA165-T2	SI. DIODE	
	D1781	MA165-T2	SI. DIODE	
	D1794	MA4062 (H) -T2	ZENER DIODE	
	D1795	MA165-T2	SI. DIODE	
	D1796	MA165-T2	SI. DIODE	
	D1831	MA165-T2	SI. DIODE	
	D1851	MA4120 (M) -T2	ZENER DIODE	
	D1852	MA4120 (M) -T2	ZENER DIODE	
	D1921	MA165-T2	SI. DIODE	
	D1922	MA165-T2	SI. DIODE	
	D1923	MA165-T2	SI. DIODE	
	D1924	MA4130 (H) -T2	ZENER DIODE	
	D1925	1N4003-T3	SI. DIODE	
⚠	D1961	W06A-T3	SI. DIODE	
⚠	D1962	W06A-T3	SI. DIODE	
⚠	D1963	W06A-T3	SI. DIODE	
⚠	D1964	W06A-T3	SI. DIODE	
	TRANSISTOR			
	Q1201	2SC2785 (JH) -T	SI. TRANSISTOR	
	Q1202	2SA1175 (JH) -T	SI. TRANSISTOR	
	Q1204	2SC2785 (JH) -T	SI. TRANSISTOR	
	Q1209	2SA1175 (JH) -T	SI. TRANSISTOR	
	Q1302	2SC2785 (JH) -T	SI. TRANSISTOR	

	SYMBOL NO.	PART NO.	PART NAME	REMARKS
	TRANSISTOR			
	Q1521	2SC2655 (Y) -T	SI. TRANSISTOR	
⚠	Q1522	2SD1555-LB	SI. TRANSISTOR	H. OUT or 2SD1427-LB
	Q1523	2SA1175 (JH) -T	SI. TRANSISTOR	
⚠	Q1601	2SC1815 (G) -T	SI. TRANSISTOR	
	Q1621	2SC1815 (YG)	SI. TRANSISTOR	
	Q1622	2SC1815 (YG)	SI. TRANSISTOR	
	Q1635	2SC2785 (JH) -T	SI. TRANSISTOR	
	Q1636	2SA1015 (YG) -T	SI. TRANSISTOR	
	Q1637	2SC1815 (YG)	SI. TRANSISTOR	
	Q1651	2SC2785 (JH) -T	SI. TRANSISTOR	
	Q1652	2SC2785 (JH) -T	SI. TRANSISTOR	
	Q1653	2SC2785 (JH) -T	SI. TRANSISTOR	
	Q1701	2SC2785 (JH) -T	SI. TRANSISTOR	
	Q1702	2SC2785 (JH) -T	SI. TRANSISTOR	
	Q1705	2SC2785 (JH) -T	SI. TRANSISTOR	
	Q1707	2SB774 (RS) -T	SI. TRANSISTOR	
	Q1708	2SB774 (RS) -T	SI. TRANSISTOR	
	Q1712	2SC2785 (JH) -T	SI. TRANSISTOR	
	Q1780	2SC2785 (JH) -T	SI. TRANSISTOR	
	Q1781	2SC2785 (JH) -T	SI. TRANSISTOR	
	Q1782	2SC2785 (JH) -T	SI. TRANSISTOR	
	Q1791	2SC3619	SI. TRANSISTOR	
	Q1851	2SC2785 (JH) -T	SI. TRANSISTOR	
	Q1852	2SC2785 (JH) -T	SI. TRANSISTOR	
	Q1853	2SC2878 (B) -T	SI. TRANSISTER	
	Q1854	2SC2878 (B) -T	SI. TRANSISTER	
	Q1857	2SA1175 (JH) -T	SI. TRANSISTOR	
⚠	Q1921	2SD1265 (QP)	SI. TRANSISTOR	
⚠	Q1922	2SC2785 (JH) -T	SI. TRANSISTOR	
	Q1923	2SC2785 (JH) -T	SI. TRANSISTOR	
	Q1924	2SA1175 (JH) -T	SI. TRANSISTOR	
	Q1925	2SC1959 (Y) -T	SI. TRANSISTER	
	IC			
⚠	IC1201	TA8601BNV	I. C.	
	IC1361	AN5352N	I. C. (M)	
⚠	IC1421	UPC1498H	I. C.	
	IC1651	TA7630P	I. C. (M)	
	IC1681	AN7168	I. C. (M)	
	IC1701	MN152121JMT3	I. C. (M)	
	IC1702	MN1280-K	I. C. (M)	
	IC1801	TA78L005AP	I. C.	
	IC1831	MN12C201D	I. C. (M)	
	IC1841	GP1U521Y	IR DETECT UNIT	
	IC1851	M51320P	I. C. (M)	
	IC1852	M5218L	I. C.	
	OTHERS			
		SGX-A001A-MU3	MTS MODULE PC BO	
	CF1501	CSB503F17	C. RESONATOR	
	CF1701	CSA4. 00MS3	CELAMIC FILTER	
	DL1201	CE40178-001	DELAY LINE	
⚠	F1961	QMF53U1-2R0S	FUSE	2. 0A
	S1201	QSL4A13-C02	LEVER SWITCH	SERVICE SW
	S1401	QSL4A13-C02	LEVER SWITCH	V. CENTER SW
	S1701	QSP4H11-C03	PUSH SWITCH	FUNCTION
	S1702	QSP4H11-C03	PUSH SWITCH	CH/LEVEL DOWN
	S1703	QSP4H11-C03	PUSH SWITCH	CH/LEVEL UP
	S1704	QSP4H11-C03	PUSH SWITCH	POWER
	S1705	QSP4H11-C03	PUSH SWITCH	VOL △
	S1706	QSP4H11-C03	PUSH SWITCH	VOL ▽
⚠	TU1701	AN3181EL-B01	TUNER	TU1701
	X1301	CE40668-001J1	CRYSTAL	

CRT SOCKET PC BOARD Ass'y (SX-3055A(H2))

	SYMBOL NO.	PART NO.	PART NAME	REMARKS
	VARIABLE R			
	R3104	QVPA803-502M	V R (B. CUT OFF)	5kΩ B
	R3105	QVPA803-502M	V R (G. CUT OFF)	5kΩ B
	R3106	QVPA803-502M	V R (R. CUT OFF)	5kΩ B
	R3111	QVPA803-201M	V R (G. DRIVE)	200 Ω B
	R3112	QVPA803-201M	V R (R. DRIVE)	200 Ω B
	RESISTOR			
⚠	R3113	QRG029J-123A	OM R	12kΩ 2W J
⚠	R3114	QRG029J-123A	OM R	12kΩ 2W J
⚠	R3115	QRG029J-123A	OM R	12kΩ 2W J
	CAPACITOR			
⚠	C3107	QCZ0121-102M	C CAP.	1000pF 3kV P
	COIL			
⚠	L3101	QQL043K-181	PEAKING COIL	180μH
⚠	L3102	CE41055-470	CHOKE COIL	
	TRANSISTOR			
	Q3101	2SC3271 (NP) -C1	SI. TRNSISITOR	
	Q3102	2SC3271 (NP) -C1	SI. TRNSISITOR	
	Q3103	2SC3271 (NP) -C1	SI. TRNSISITOR	
	OTHERS			
⚠		A75522-H	CRT SOCKET	

S VIDEO PC BOARD Ass'y (SX-7203A(H2))

SYMBOL NO.	PART NO.	PART NAME	REMARKS
VARIABLE R			
R7272	QVPA802-501M	V R (COMB FILTER)	500 Ω B
TRANSFORMER			
T7251	CE40176-001	DL P TRANSF.	
COIL			
L7202	A76186-27Z-T	PEAKING COIL	27μH
L7203	CE40041-5R6ZJ1	PEAKING COIL	5.6μH
TRANSISTOR			
Q7205	2SC1815 (YG) -T	SI. TRANSISTOR	
Q7206	2SC1815 (YG) -T	SI. TRANSISTOR	
Q7207	2SC1815 (YG) -T	SI. TRANSISTOR	
Q7208	2SC1815 (YG) -T	SI. TRANSISTOR	
Q7211	2SC1815 (YG) -T	SI. TRANSISTOR	
Q7212	2SA1015 (YG) -LB	SI. TRANSISTOR	
Q7213	2SC1815 (YG) -T	SI. TRANSISTOR	
Q7214	2SC1815 (YG) -T	SI. TRANSISTOR	
Q7301	2SC1815 (YG) -T	SI. TRANSISTOR	
Q7311	2SC1815 (YG) -T	SI. TRANSISTOR	
Q7312	2SA1015 (YG) -T	SI. TRANSISTOR	
Q7861	2SC1815 (YG) -T	SI. TRANSISTOR	
Q7862	2SC1815 (YG) -T	SI. TRANSISTOR	
IC			
IC7202	BU4066B	I. C.	or MN4066B
OTHERS			
DL7202	CE40907-A01	1H DELAY LINE	

POWER PC BOARD Ass'y (SX-9141A(H2))

	SYMBOL NO.	PART NO.	PART NAME	REMARKS
	RESISTOR			
⚠	R9901	QRF074K-1R8J5	UNF R	1.8Ω 7W K
⚠	R9904	QRD122J-103SJ2	C R	10kΩ 1/2W J
⚠	R9905	QRF154J-331J5	UNF R	330Ω 15W J
⚠	R9907	QRF054K-4R7J5	UNF R	4.7Ω 5W K
⚠	R9909	QRF154J-331J5	UNF R	330Ω 15W J
	CAPACITOR			
⚠	C9901	QCZ9034-472A	C CAP.	4700pFAC125V P
⚠	C9902	QCZ9034-472A	C CAP.	4700pFAC125V P
⚠	C9903	QCZ9034-472A	C CAP.	4700pFAC125V P
⚠	C9904	QEU72DM-567M	E CAP.	560μF 200V M
⚠	C9907	QFZ9025-104M	MF CAP.	0.1μFAC125V M
⚠	C9908	QFZ9025-104M	MF CAP.	0.1μFAC125V M
	DIODE			
⚠	D9901	1S1887A-T3	SI. DIODE	
⚠	D9902	1S1887A-T3	SI. DIODE	
⚠	D9903	1S1887A-T3	SI. DIODE	
⚠	D9904	1S1887A-T3	SI. DIODE	
⚠	D9905	1S1887A-T3	SI. DIODE	
	IC			
⚠	IC9901	STR30130-A	I. C. (H)	
	OTHERS			
⚠	F9901	QMF66U1-5R0S	FUSE	5.0A
⚠	F9902	QMF53U1-1R25S	FUSE	1.25A
⚠	LF9901	CE41506-00BJ1	LINE FILTER	
⚠	RY9901	CESK002-001	RELAY	
⚠	TH9901	CE40595-001	TH POSISTOR	or CE40595-001T

MODULE PC BOARD PARTS LIST

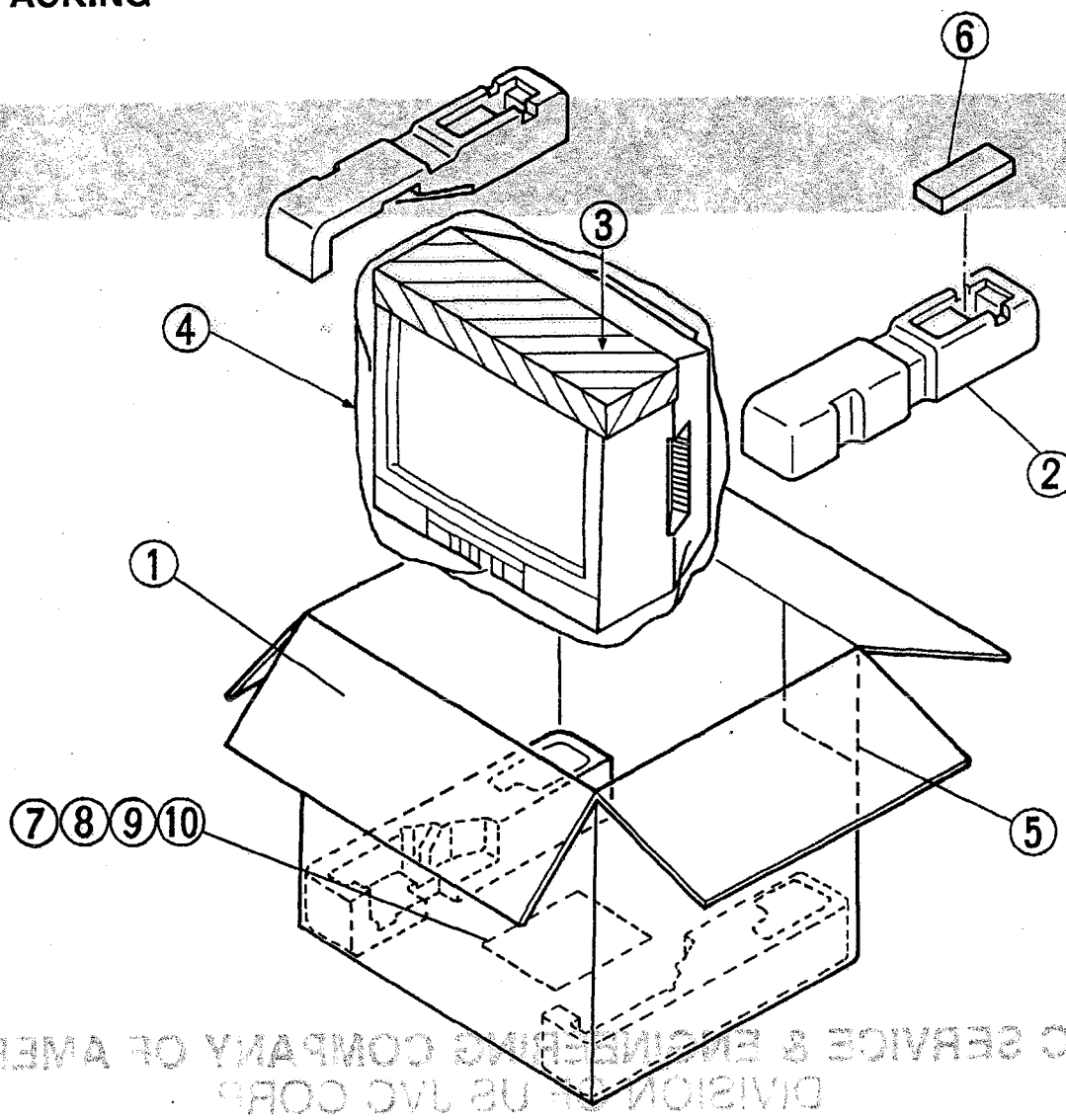
The following module pc boards are supplied as assemblies.

The component parts on the module PC boards are available only when the parts are listed in the "MODULE PRINTED CIRCUIT BOARD PARTS LIST".

IF MODULE PC BOARD Ass'y (SFX-F004A)

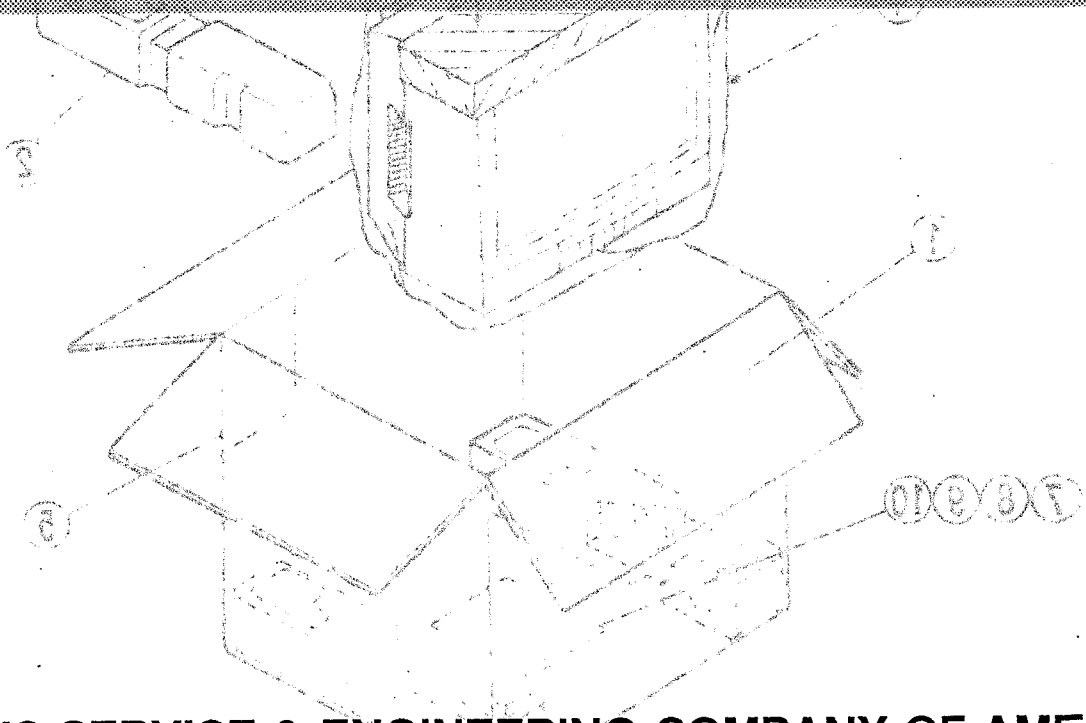
MTS MODULE PC BOARD Ass'y (SGX-A001A-MU3) with in MAIN PC BOARD Ass'y

PACKING



PACKING PARTS LIST

SYMBOL NO.	PART NO.	PART NAME	REMARKS	
1	CP10972-015-A	PACKING CASE		*
2	CP10725-00A-A	CUSHION ASSY	4pcs in 1set	*
3	CP30055-002-A	TOP COVER		*
4	CP30056-002-A	POLY. BAG		*
5	CM20926-00A-A	REC KEEPING CARD		*
6	RM-C424-KD	REMOCON		
7	CM21229-B01	SAFETY TIPS		
8	BT-20108	SERVICE INF CARD		
9	BT-20113	WARRANTY CARD		
10	AV2650S-US-IBA	INST. BOOK		



JVC SERVICE & ENGINEERING COMPANY OF AMERICA
DIVISION OF US JVC CORP.

Head office (East Coast)	: 107 Little Falls Road Fairfield, New Jersey 07006	(201)808-2100
Midwest	: 2250 Lively Blvd.,Elk Grove,Illinois 60007	(708)364-0880
Southwest	: 407 Garden Oaks Blvd.,Houston,Texas 77018	(713)694-3331
West Coast	: 5066 Corporate Avenue,Cypress,California 90630	(714)229-8011
Southeast	: 3040 Northwoods Parkway,Norcross,Georgia 30071	(404)441-9244
Hawaii	: 2969 Mapunapuna Place Honolulu, Hawaii 96819	(808)833-5828

JVC

AV2650SU-SHA

Printed in Ja
90 07 V.P.
MH